KARACHI DEVELOPMENT AUTHORITY



LOCALGOVERNMENT DEPARTMENT GOVERNMENT OF SINDH

Bidding Documents Volume-I

CONSTRUCTION / REHABILITATION OF ROAD FROM 4-K CHOWRANGI NORTH KARACHI TO GULSHAN-E-MAYMAR, YOUSUF GOTH DISTRICT WEST, KARACHI. (2314/2022-23)

BID DOCUMENTS ARE PLACED IN THE FOLLOWING FOLDERS

VOLUME I: TECHNICAL BID

1. INVITATION FOR BID

2. INSTRUCTION TO BIDDERS

3. **BIDDING DATA**

4. FORM OF BID AND APPENDICES TO BID

5. CONTRACT FORMS

6. GENERAL CONDITIONS OF CONTRACT7. SPECIAL CONDITIONS OF CONTRACT

8. SPECIAL PROVISIONS

VOLUME II: BILL OF QUANTITIES

VOLUME III: TECHNICAL SPECIFICATIONS

VOLUME IV: DRAWINGS

BID DOCUMENTS

FOR

Construction / Rehabilitation of Road from 4-K Chowrangi North Karachi to Gulshan-e-Maymar, Yousuf Goth District West, Karachi. (2314/2022-23)

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VOLUME II: BILL OF QUANTITIES

VOLUME III: TECHNICAL SPECIFICATIONS

1. National Highway Authority (NHA) General Specifications (Dec 1998) - Bidders are instructed to purchase the Specifications from the source of origin.

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INVITATION FOR BIDS

NOTICE INVITING TENDERS

	Date:
Provincial	Government Funds: ADP No. 2314/2022-23
	Bid Reference No:

Refer Invitation for Tenders issued by Karachi Development Authority

INSTRUCTIONS TO BIDDERS

INSTRUCTIONS TO BIDDERS

A. GENERAL

IB.1 Scope of Bid

Procuring agency as defined in the bidding data hereinafter called "the procuring agency" wishes to receive bids for the construction and completion of works as described in these bidding documents, and summarized in the bidding data hereinafter referred to as the "Works".

The successful bidder will be expected to complete the works within the time specified in Appendix-A to Bid.

IB.2 Source of Funds

Procuring agency has received/allocated/] applied for loan/grant / Federal / Provincial/Local Government funds from the source(s) indicated in the bidding data in various currencies towards the cost of the project /scheme specified in the bidding data, and it is intended that part of the proceeds of this loan/grant/funds will be applied to eligible payments under the contract for which these bidding documents are issued.

IB.3 Eligible Bidders

This Invitation for Bids is open to all interested bidders who are eligible under provisions of Sindh Public Procurement Rules as mentioned below and the criteria given in the Notice Inviting Tender (NIT)/Bidding Document.

Firms and individuals, national or international, may be allowed to bid for any project where international competitive bidding is feasible. Any conditions for participation shall be limited to those that are essential to ensure the bidder"s capability to fulfill the contract in question.

- (a) Bidders may be excluded if;
 - (i) as a matter of law or official regulations, commercial relations are prohibited with the bidder's country by the federal government in case of ICB, or
 - (ii) a firm is blacklisted/ debarred by the procuring agency and the matter has been reported to the Authority, subject to Rule 30 of Sindh Public Procurement Rules 2010.
- (b) Government-owned enterprises or institutions may participate only if they can establish that they are;
 - (i) legally and financially autonomous, and
 - (ii) operate under commercial law.

Provided that where government-owned universities or research centers in the country are of a unique and exceptional nature, and their participation is critical to project implementation, they may be allowed to participate; and Bidders shall include all those contractors who are registered or incorporated in Pakistan, irrespective of the nationality of their owners and professional staff, or

- (c) Bidders are:-
 - (i) pre-qualified with procuring agency for particular project/scheme;
 - (ii) registered with Pakistan Engineering Council in particular category and discipline,
 - (iii) registered with relevant tax authorities (income/sales tax, FBR/SRB wherever applicable)

IB.4 One Bid per Bidder

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

IB.5 Cost of Bidding

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

IB.6 Site Visit

The bidders are advised to visit and examine the site of works and its surroundings and obtain all information that may be necessary for preparing the bid and entering into a contract for construction of the works. All cost in this respect shall be at the bidder"s own expense.

The bidders and any of their personnel or agents will be granted permission by the procuring agency to enter upon his premises and lands for the purpose of such inspection, but only upon the express condition that the bidders, their personnel and agents, will release and indemnify the procuring agency, his personnel and agents from and against all liability in respect thereof and will be responsible for death or personal injury, loss of or damage to property and any other loss, damage, costs and expenses incurred as a result of such inspection.

B. BIDDING DOCUMENTS

IB.7 Contents of Bidding Documents (SSP RULE 21)

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

- a. Instructions to Bidders.
- b. Bidding Data.
- c. General Conditions of Contract, Part-I (GCC).
- d. Special Conditions of Contract, Part-II (SCC)
- e. Specifications.
- f. Form of Bid and Appendices to Bid.
- g. Bill of Quantities (Appendix-D to Bid).
- h. Form of Bid Security.
- i. Form of Contract Agreement.
- j. Forms of Performance Security, Mobilization Advance Guarantee, Integrity Pact and Indenture bond for secured advance.
- k. Drawings.

The bidders are expected to examine carefully the contents of all the above documents. Failure to comply with the requirements of bid submission will be at the bidder so wn risk. Pursuant to Clause IB.26, bids which are not substantially responsive to the requirements of the BD will be rejected.

IB.8 Clarification of Bidding Documents (SSP RULE 23(1)):

Any interested bidder requiring any clarification(s) in respect of the bidding documents may notify the procuring agency in writing at the procuring agency saddress indicated in the Invitation for Bids/NIT. Procuring agency will respond to any request for clarification provided they are received at least five calendar days prior to the date of opening of bid.

Provided that any clarification in response to query by any bidder; shall be communicated to all parties who have obtained bidding documents.

IB.9 Addendum/Modification of Bidding Documents:

At any time prior to the deadline for submission of bids, the procuring agency may, for any reason, whether at his own initiative or in response to a clarification requested by a interested bidder, modify the bidding documents by issuing addendum.

Any addendum thus issued shall be part of the bidding documents pursuant to subclause IB 7.1 hereof and shall be communicated in writing to all bidders. Interested bidders shall acknowledge receipt of each addendum in writing to the procuring agency.

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

C. PREPARATION OF BIDS

IB.10 Language of Bid

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

IB.11 Documents Accompanying the Bid

To qualify, each bidder shall:

- (a) submit a written authorization on the letterhead of the bidding firm, authorizing the signatory of the bid to act for and on behalf of the bidder;
- (b) update the information indicated and listed in the bidding data and previously submitted with the application for prequalification, and continue to meet the minimum criteria set out in the prequalification documents, which as a minimum, would include the following:
 - (i) Evidence of access to financial resources along with average annual construction turnover of last 3 years.
 - (ii) Financial predictions for the current year and the following two years, including the effect of known commitments;
 - (iii) Work commitments since prequalification;
 - (iv) Current litigation information; and
 - (v) Availability of critical equipment.

And

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

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

Bids submitted by a joint venture of two (2) or more firms shall comply with the following requirements:

- (a) one of the joint venture partners shall be nominated as being in charge; and this authorization shall be evidenced by submitting a power of attorney signed by legally authorized signatories of all the joint venture partners;
- (b) the bid, and in case of a successful bid, the Form of Contract Agreement shall be signed by the authorized partner so as to be legally binding on all partners;
- (c) the partner-in-charge shall always be duly authorized to deal with the procuring agency regarding all matters related with and/or incidental to the execution of works as per the terms and Conditions of Contract and in this regard to incur any and all liabilities, receive instructions, give binding undertakings and receive payments on behalf of the joint venture;
- (d) all partners of the joint venture shall at all times and under all circumstances be liable jointly and severally for the execution of the contract in accordance with the contract terms and a statement to this effect shall be included in the authorization mentioned under Sub-Para (a) above as well as in the Form of Bid and in the Form of Contract Agreement (in case of a successful bid);
- (e) a copy of the agreement entered into by the joint venture partners shall be submitted with the bid stating the conditions under which it will function, its period of duration, the persons authorized to represent and obligate it and which persons will be directly responsible for due performance of the contract and can give valid receipts on behalf of the joint venture, the proportionate participation of the several firms forming the joint venture, and any other information necessary to permit a full appraisal of its functioning. No amendments / modifications whatsoever in the joint venture agreement shall be agreed to between the joint venture partners without prior written consent of the procuring agency;
- (f) submission of an alternative Letter of Intent to execute a Joint Venture Agreement shall be mandatory.

Bidders shall also submit proposals of work methods and schedule, in sufficient detail to demonstrate the adequacy of the bidders" proposals to meet the technical specifications and the completion time referred to sub- clause IB 1.2 hereof.

IB.12 Bid Prices

Unless stated otherwise in the bidding documents, the contract shall be for the whole of the works as described in IB 1.1 hereof, based on the unit rates or prices submitted by the bidder or percentage quoted above or below on the rates of Composite Schedule of Rates (CSR), as the case may be.

The bidders shall fill in rates and prices for all items of the works described in the Bill of Quantities. Items against which no rate or price is entered by a bidder will not be paid for by the procuring agency when executed and shall be deemed to be covered by rates and prices for other items in the Bill of Quantities. In case of Composite Schedule of Rates, if the bidder fails to mention the percentage above or below, it shall be deemed to be at par with the rates of Composite Schedule of Rates.

The bid price submitted by the contractor shall include all rates and prices including the taxes. All duties, taxes and other levies payable by the contractor under the contract, or for any other cause during the currency of the execution of the work or otherwise specified in the contract as on the date seven days prior to the deadline for submission of bids.

Additional / reduced duties, taxes and levies due to subsequent additions or changes in legislation shall be reimbursed / deducted as per Sub-Clause 13.7 of the General Conditions of Contract Part-I.

The rates and prices quoted by the bidders are subject to adjustment during the performance of the contract in accordance with the provisions of Clause 13.7of GCC. The bidders shall furnish the prescribed information for the price adjustment formulae in Appendix-C to Bid, and shall submit with their bids such other supporting information as required under the said Clause. Adjustment in prices quoted by bidders shall be allowed as per Sub-Para 4(ii) of Section C of Instructions to bidders and bidding data.

IB.13 Currencies of Bid and Payment

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 supplied from outside the procuring agency"s country (referred to as the "Foreign Currency Requirements") shall indicate the same in Appendix-B to Bid. The proportion of the bid price (excluding Provisional Sums) needed by him for the payment of such Foreign Currency Requirements either (i) entirely in the currency of the bidder"s home country or, (ii) at the bidder"s option, entirely in Pak rupees provided always that a bidder expecting to incur expenditures in a currency or currencies other than those stated in (i) and (ii) above for a portion of the foreign currency requirements, and wishing to be paid accordingly, shall indicate the respective portions in the bid.

The rates of exchange to be used by the bidder for currency conversion shall be the selling rates published and authorized by the State Bank of Pakistan prevailing on the date, 07 (seven) days prior to the deadline for submission of bids. For the purpose of payments, the exchange rates used in bid preparation shall apply for the duration of the contract.

IB.14 Bid Validity

Bids shall remain valid for the period stipulated in the bidding data from the date of opening of bid specified in clause IB.23.

In exceptional circumstances, prior to expiry of the original, the procuring agency may request the bidders to extend the period of validity for a specified additional period, which shall not be for more than one third of the original period of bid validity. The request and the responses thereto, shall be made in writing. A bidder may refuse the request without the forfeiture of the bid security. In case, a bidder agreed to the request, shall not be required or permitted to modify the bid, but will be required to extend the validity of the bid security for the period of the extension, and in compliance with Clause IB.15 in all respects.

IB.15 Bid Security

Each bidder shall furnish, as part of the bid, a bid security in the amount stipulated in the bidding data in Pak Rupees or an equivalent amount in a freely convertible currency.

The bid security shall be at the option of the bidder, in the form of deposit at call, Pay order or a bank guarantee issued by a Scheduled Bank in Pakistan or from a foreign bank duly counter guaranteed by a Scheduled Bank in Pakistan in favour of the procuring agency, which should commensurate with the bid validity period. The bank guarantee for bid security shall be acceptable in the manner as provided at Annexure BS-1

Any bid not accompanied by an acceptable bid security shall be rejected by the procuring agency as non-responsive.

Bid security shall be released to the unsuccessful bidders once the contract has been signed with the successful bidder or the validity period has expired.

The bid security of the successful bidder shall be returned when the bidder has furnished the required Performance Security and signed the Contract Agreement.

The bid security may be forfeited:

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

IB.16 Alternate Proposals/Bids

Each bidder shall submit only one bid either by himself, or as a member of a joint venture, until and unless they have been requested or permitted for alternative bid, then he has to purchase separate bidding documents and alternate bid shall be treated as separate bid.

Alternate proposals are allowed only for procurement of works where technical complexity is involved and more than one designs or technical solutions are being offered. Two stage two envelope bidding procedure will be appropriate when alternate proposal is required.

Alternate bid(s) shall contain (a) relevant design calculations; (b) technical specifications; (c) proposed construction methodology; and (d) any other relevant details / conditions, provided that the total sum entered on the Form of Bid shall be that which represents complete compliance with the bidding documents.

IB.17 Pre-Bid Meeting

Procuring agency may, on his own motion or at the request of any bidder, hold a prebid meeting to clarify issues and to answer any questions on matters related to the bidding documents. The date, time and venue of pre-bid meeting, if convened, shall be communicated to all bidders. All bidders or their authorized representatives shall be invited to attend such a pre-bid meeting at their own expense.

The bidders are requested to submit questions, if any, in writing so as to reach the Procuring agency not later than seven (7) days before the proposed pre-bid meeting.

Minutes of the pre-bid meeting, including the text of the questions raised and the replies given, will be transmitted without delay to all bidders. Any modification of the bidding documents listed in sub- clause IB 7.1 hereof, which may become necessary as a result of the pre- bid meeting shall be made by the procuring agency exclusively through the issue of an Addendum pursuant to Clause IB.9 and not through the minutes of the pre-bid meeting.

Absence at the pre-bid meeting will not be a cause for disqualification of a bidder.

IB.18 Format and Signing of Bid

Bidders are particularly directed that the amount entered on the Form of Bid shall be for performing the contract strictly in accordance with the bidding documents.

All appendices to bid are to be properly completed and signed.

Alteration is not to be made neither in the form of bid nor in the Appendices thereto except in filling up the blanks as directed. If any such alterations be made or if these instructions be not fully complied with, the bid may be rejected.

Each bidder shall prepare by filling out the forms without alterations and shall provide an original copy along with photocopies as per the requirement of the procuring agency specified in the bidding data. The original as well as copies of the document shall be clearly marked as "ORIGINAL" and "COPY", as the case may be. If there is any discrepancy between original and copy(ies) then the original shall prevail.

The original and all copies of the bid shall be typed or written in indelible ink (in the case of copies, Photostats are also acceptable) and shall be signed by a person(s) duly authorized to sign on behalf of the bidder pursuant to sub- clause IB 11.1(a) hereof. All pages of the bid shall be initialled and stamped by the person(s) signing the bid.

The bid shall contain no alterations, omissions or additions, except to comply with instructions issued by the procuring agency, or as are necessary to correct errors made by the bidder. Such corrections shall be initialled by the person(s) signing the bid.

Bidders shall indicate in the space provided in the Form of Bid their full and proper postal addresses at which notices may be legally served on them and to which all correspondence in connection with their bids and the contract is to be sent.

Bidders should retain a copy of the bidding documents as their file copy

D. SUBMISSION OF BIDS

IB.19 Sealing and Marking of Bids

Each bidder shall submit his bid as under:

- (a) ORIGINAL and Two COPIES of the bid shall be separately sealed and put in separate envelopes and marked as such.
- (b) The envelopes containing the ORIGINAL and COPIES shall be put in one sealed envelope and addressed as given in sub clause IB 19.2 hereof.

The inner and outer envelopes shall:

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

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

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

IB.20 Deadline for Submission of Bids

- 20.1 (a) Bids must be received by the procuring agency at the address specified not later than the time and date stipulated in the bidding data,
 - (b) Bids with charges payable will not be accepted, nor will arrangements be undertaken to collect the bids from any delivery point other than that specified above. Bidders shall bear all expenses incurred in the preparation and delivery of bids. No claims shall be entertained for refund of such expenses,
 - (c) Where delivery of a bid is by mail and the bidder wishes to receive an acknowledgment of receipt of such bid, he shall make a request for such acknowledgment in a separate letter attached to but not included in the sealed bid package,
 - (d) Upon request, acknowledgment of receipt of bids will be provided to those making delivery in person or by messenger.

The Procuring Agency may, at its discretion, extend the deadline for submission of bids by issuing an amendment in accordance with IB 09. In such case, all rights and obligations of the procuring agency and the bidders shall remain the same as mentioned in the original deadline.

IB.21 Late Bids

- (a) any bid received by the procuring agency after the deadline for submission of bids prescribed in to clause IB 20 shall be returned unopened to such bidder.
- (b) delays in the mail, person in transit, or delivery of a bid to the wrong office shall not be accepted as an excuse for failure to deliver a bid at the proper place and time. It shall be the bidder's responsibility to submit the bid in time.

IB.22 Modification, Substitution and Withdrawal of Bids

Any bidder may modify, substitute or withdraw his bid after bid submission provided that the modification, substitution or written notice of withdrawal is received by the procuring agency prior to the deadline for submission of bids.

The modification, substitution, or notice for withdrawal of any bid shall be prepared, sealed, marked and delivered in accordance with the provisions of Clause IB.19 with the outer and inner envelopes additionally marked "MODIFICATION", "SUBSTITUTION" or "WITHDRAWAL" as appropriate.

No bid may be modified by a bidder after the deadline for submission of bids except in accordance with to sub - clauses IB 22.1 and IB 27.2.

Withdrawal of a bid during the interval between the deadlines for submission of bids and the expiration of the period of bid validity specified in the Form of Bid may result in forfeiture of the bid security in pursuance to clause IB 15.

E. BID OPENING AND EVALUATION.

IB.23 Bid Opening

Procuring agency will open the bids, including withdrawals, substitution and modifications made pursuant to Clause IB.22, in the presence of bidders" representatives who choose to attend, at the time, date and location stipulated in the bidding data. The bidders or their representatives who are in attendance shall sign an attendance sheet.

Envelopes marked "MODIFICATION", "SUBSTITUTION" or "WITHDRAWAL" shall be opened and read out first. Bids for which an acceptable notice of withdrawal has been submitted pursuant to clause IB.22 shall not be opened.

Procuring agency shall read aloud the name of the bidder, total bid price and price of any Alternate Proposal(s), if any, discounts, bid modifications, substitution and withdrawals, the presence or absence of bid security, and such other details as the procuring agency may consider appropriate, and total amount of each bid, and of any alternative bids if they have been requested or permitted, shall be read aloud and recorded when opened.

Procuring Agency shall prepare minutes of the bid opening, including the information disclosed to those present in accordance with the sub-clause IB.23.3.

IB.24 Process to be Confidential. (SPP Rule 53)

24.1 Information relating to the examination, clarification, evaluation and comparison of bid and recommendations for the award of a contract shall not be disclosed to bidders or any other person not officially concerned with such process before the announcement of bid evaluation report in accordance with the requirements of Rule 45, which states that Procuring agencies shall announce the results of bid evaluation in the form of a report giving reasons for acceptance or rejection of bids. The report shall be hoisted on website of authority and that of procuring agency if it website exists and intimated to all bidders at least seven (7) days prior to the award of contract The announcement to all bidders will include table(s) comprising read out prices, discounted prices, price adjustments made, final evaluated prices and recommendations against all the bids evaluated. Any effort by a bidder to influence the procuring agency"s processing of bids or award decisions may result in the rejection of such bidder"s bid. Whereas, any bidder feeling aggrieved, may lodge a written complaint as per Rule 31; however mere fact of lodging a complaint shall not warrant suspension of the procurement process.

IB.25 Clarification of Bid (SPP Rule 43)

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

IB.26 Examination of Bids and Determination of Responsiveness

Prior to the detailed evaluation of bids, the procuring agency will determine whether the bidder fulfils all codal requirements of eligibility criteria given in the tender notice such as registration with tax authorities, registration with PEC (where applicable), turnover statement, experience statement, and any other condition mentioned in the NIT and bidding document. If the bidder does not fulfill any of these conditions, it shall not be evaluated further.

Once found to be fulfilling the eligibility criteria, as mentioned in sub- clause 26.1, the bids of eligible bidders will be evaluated for technical responsiveness as per specification and criteria given in the bidding documents. Technical and financial evaluations may be carried out in accordance with single stage-single one envelope, single stage-two envelopes, two stage or two stage-two envelopes bidding procedures, depending on the selection procedure adopted by the procuring agency.

A bid will be considered technically responsive if it (i) has been properly signed; (ii) is accompanied by the required bid security; and (iii) conforms to all the terms, conditions and specifications of the bidding documents, without material deviation or reservation. A material deviation or reservation is one (i) which affect in any substantial way the scope, quality or performance of the works; (ii) which limits in any substantial way, inconsistent with the bidding documents, the procuring agency"s rights or the bidder"s obligations under the contract; or (iii) adoption/rectification whereof would affect unfairly the competitive position of other bidders presenting substantially responsive bids.

If a bid has major deviations to the commercial requirements and technical specifications will be considered technically non responsive. As a general rule, major deviations are those that if accepted, would not fulfil the purposes for which the bid is requested, or would prevent a fair comparison or affect the ranking of the bids that are compliant with the bidding documents.

(A) Major (material) Deviations include:-

- (i) has been not properly signed;
- (ii) is not accompanied by the bid security of required amount and manner;
- (iii) stipulating price adjustment when fixed price bids were called for;
- (iv) failing to respond to specifications;
- (v) failing to comply with Mile-stones/Critical dates provided in Bidding Documents;
- (vi) sub-contracting contrary to the Conditions of Contract specified in Bidding Documents;
- (vii) refusing to bear important responsibilities and liabilities allocated in the Bidding Documents, such as performance guarantees and insurance coverage;
- (viii) taking exception to critical provisions such as applicable law, taxes and duties and dispute resolution procedures;
- (ix) a material deviation or reservation is one :
 - (a) which affect in any substantial way the scope, quality or performance of the works;
 - (b) adoption/rectification whereof would affect unfairly the competitive position of other bidders presenting substantially responsive bids.

(B) Minor Deviations

Bids that offer deviations acceptable to the Procuring Agency and which can be assigned a monetary value may be considered substantially responsive at least as to the issue of fairness. This value would however be added as an adjustment for evaluation purposes only during the detailed evaluation process.

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

IB.27 Correction of Errors before Financial Evaluation

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

- (a) where there is a discrepancy between the amounts in figures and in words, the amount in words will govern; and
- (b) where there is a discrepancy between the unit rate and the line item total resulting from multiplying the unit rate by the quantity, the unit rate as quoted will govern, unless in the opinion of the procuring agency there is an obviously gross misplacement of the decimal point in the unit rate, in which case the line item total as quoted will govern and the unit rate will be corrected.

The amount stated in the Form of Bid will be adjusted by the procuring agency in accordance with the above procedure for the correction of errors and with the concurrence of the bidders. The amount thus corrected shall be considered as binding upon the bidder. If the bidder does not accept the corrected bid price, his bid will be rejected, and the bid security shall be forfeited in accordance with sub-clause IB 15.6(b) hereof.

IB.28 Financial Evaluation and Comparison of Bids

The procuring agency will evaluate and compare only the Bids determined to be substantially responsive in accordance with clause IB 26.

In evaluating the Bids, the procuring agency will determine for each bid the evaluated bid price by adjusting the bid price as follows:

- (a) making any correction for errors pursuant to clause IB 27;
- (b) excluding provisional sums (if any), for contingencies in the Summary Bill of Quantities, but including competitively priced Day work; and
- (c) making an appropriate adjustment for any other acceptable variation or deviation.

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.

If the bid of the successful bidder is seriously unbalanced in relation to the procuring agency"s estimate of the cost of work to be performed under the contract, the procuring agency may require the bidder to produce detailed price analyses for any or all items of the Bill of Quantities to demonstrate the internal consistency of those prices with the construction methods and schedule proposed. After evaluation of the price analyses, the procuring agency may require that the amount of the Performance Security set forth in clause IB.32 be increased at the expense of the successful bidder to a level sufficient to protect the procuring agency against financial loss in the event of default of the successful bidder under the contract.

Bidders may be excluded if involved in "Corrupt and Fraudulent Practices" means either one or any combination of the practices given below SPP Rule2(q);

(i) "Coercive Practice" means any impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence the actions of a party to achieve a wrongful gain or to cause a wrongful loss to another party;

- (ii) "Collusive Practice" means any arrangement between two or more parties to the procurement process or contract execution, designed to achieve with or without the knowledge of the procuring agency to establish prices at artificial, non competitive levels for any wrongful gain;
- (iii) "Corrupt Practice" means the offering, giving, receiving or soliciting, directly or indirectly, of anything of value to influence the acts of another party for wrongful gain;
- (iv) "Fraudulent Practice" means any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;
- (v) "Obstructive Practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in a procurement process, or affect the execution of a contract or deliberately destroying, falsifying, altering or concealing of evidence material to the investigation or making false statements before investigators in order to materially impede an investigation into allegations of a corrupt, fraudulent, coercive or collusive practice; or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation, or acts intended to materially impede the exercise of inspection and audit rights provided for under the Rules.

28.6 Evaluation Report (SPP Rule 45)

After the completion of evaluation process, as described in clauses IB 27 and IB 28, the procuring agency shall announce the results of bid evaluation in the form of report (available on the website of the authority) giving reasons for acceptance and rejection of bid. The report shall be hoisted on website of the authority and that of procuring agencies if its website exists and intimated to all bidders at least seven (7) days prior to the award of contract.

F. AWARD OF CONTRACT

IB.29 Award (SPP Rule 49)

Subject to clauses IB 30 and IB 34 and provision of the rule: The procuring agency shall award the contract to the bidder whose bid has been determined to be substantially responsive to the bidding documents, and who has offered the lowest evaluated bid, but not necessarily the lowest submitted price, within the original or extended period of bid validity. Provided that such bidder has been determined to be eligible in accordance with the provisions of clause IB 03 and qualify pursuant to sub-clause IB 29.2.

Procuring agency, at any stage of the bid evaluation, having credible reasons for or having prima facie evidence of any deficiency (ies) in contractor capacities, may require the contractor to provide information concerning their professional, technical, financial, legal or managerial competence whether already pre-qualified or not for the said project.

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

IB.30 Procuring Agency's Right to reject all Bids or Annul/Cancellation the Bidding Process (SPP Rule 25)

Notwithstanding clause IB 29 and provision of the rule: (1) A procuring agency reserves may cancel the bidding process at any time prior to the acceptance of a bid or proposal; (2) The procuring agency shall incur no liability towards bidders solely by virtue of its invoking sub—rule (1); (3) Intimation of the cancellation of bidding process shall be given promptly to all bidders and bid security shall be returned along with such intimation; (4) The procuring agency shall, upon request by any of the bidders, communicate to such bidder, grounds for cancellation of the bidding process, but is not required to justify such grounds.

IB.31 Notification/Publication of the Award of Contract (SPP Rule 25).

Prior to expiry of the period of bid validity, including extension, prescribed by the procuring agency, the procuring agency shall notify the successful bidder in writing ("Letter of Acceptance") that his bid has been accepted. This letter shall mention the sum which the procuring agency will pay to the contractor in consideration of the execution and completion of the works by the contractor as prescribed by the contract (hereinafter and in the conditions of contract called the "Contract Price").

No negotiation with the bidder having evaluated as lowest responsive or any other bidder shall be permitted, however, procuring agency may hold meetings to clarify any item in the bid evaluation report.

The notification of award and its acceptance by the bidder will constitute the formation of the contract, binding the procuring agency and the bidder till signing of the formal Contract Agreement.

Upon furnishing by the successful bidder of a Performance Security and signing of the contract, the procuring agency will promptly notify the name of the successful bidder to all bidders and return their bid securities accordingly.

Within seven days of the award of contract, procuring agency shall publish on the website of the Authority and on its own website, if such a website exists, the results of the bidding process, identify the bid through procurement identifying numbers, and the following information:

- (1) Evaluation Report;
- (2) Form of Contract and letter of Award;
- (3) Bill of Quantities or Schedule of Requirement.

Debriefing (SPP Rule 51).

- (a) A bidder may ask the procuring agency for reasons for non-acceptance of his bid and may request for a debriefing meeting and procuring agency shall give him the reasons for such non acceptance, either in writing or by holding a debriefing meeting with such a bidder.
- (b) The requesting bidder shall bear all the costs of attending such a debriefing.

IB.32 Performance Security (SPP Rule 39)

The successful bidder shall furnish to the procuring agency a Performance Security in the form of pay order or demand draft or bank guarantee, and the amount stipulated in the bidding data and the Conditions of Contract within a period of 28 days after the receipt of Letter of Acceptance.

Failure of the successful bidder to comply with the requirements of Sub-clause IB.32.1 or clauses IB 33 or IB 35 shall constitute sufficient grounds for the annulment of the award and forfeiture of the bid security.

Validity of performance security shall extend at least ninety days beyond the date of completion of contract, or as mentioned in the bidding data to cover defects liability period or maintenance period subject to final acceptance by the procuring agency.

IB.33 Signing of Contract Agreement (SPP Rule 39)

Within 14 days from the date of furnishing of acceptable Performance Security under the Conditions of Contract, the procuring agency will send the successful bidder the Contract Agreement in the form provided in the bidding documents, incorporating all agreements between the parties.

The formal Agreement between the procuring agency and the successful bidder shall be executed within 14 days of the receipt of the Contract Agreement by the successful bidder from the procuring agency.

A procurement contract shall come into force when the procuring agency requires signs contract, the date on which the signatures of both the procuring agency and the successful bidder are affixed to the written contract. Such affixing of signatures shall take place within the time prescribed in the bidding documents.

Provided that the procuring agency may reduce the maximum time limit for signing of contract, as and when required, and shall be mentioned in the bidding documents.

Stamp Duty.

The formal Agreement between the Procuring Agency and the successful bidder shall be duly stamped at rate of 35% of bid price (updated from time to time) stated in Letter of Acceptance

IB.34 General Performance of the Bidders

Procuring agency may in case of consistent poor performance of the contractor and his failure to remedy the underperforming contract may take such action as may be deemed appropriate under the circumstances of the case including the rescinding the contract and/or black listing of such contractor and debarring him from participation in future bidding process.

IB.35 Integrity Pact (SPP Rule 89)

The bidder shall sign and stamp the Integrity Pact provided at Appendix-L to the bidding documents for all Provincial/Local Government procurement contracts exceeding Rupees ten million. Failure to provide such Integrity Pact shall make the bidder non-responsive.

IB.36 Instructions not Part of Contract

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

IB.37 Arbitration (SPP Rule 34)

Any dispute that is not amicably resolved shall be finally settled, unless otherwise specified in the Contract, under the Arbitration Act 1940 updated from time to time and would be held anywhere in the Province of Sindh at the discretion of procuring agency.

BIDDING DATA

Contact/BiddingData

Instructions to Bidders

Clause Reference

Name and address of the procuring agency:

Superintending Engineer, Room No.406, 4th Floor Civic Centre, Gulshan-e-Iqbal Karachi.

Name of the Project and Summary of the works:

Name of Project:

"CONSTRUCTION/REHABILITATION OF ROAD FROM 4-K CHOWRANGI NORTH KARACHI TO GULSHAN-E-MAYMAR YOUSUF GOTH, KARACHI

Name of Work:

"CONSTRUCTION/REHABILITATION OF ROAD FROM 4-K CHOWRANGI NORTH KARACHI
TO GULSHAN-E-MAYMAR YOUSUF GOTH, KARACHI

(The Works). The Works will involve following major activities:

- Laying of Sub-base, Aggregate Base Course, Asphaltic Base Course, Asphaltic Wearing Course.
- RCC Pipe, RCC Box Drain.
- Construction of Drainage/Erosion Control Structures.
- Ancillary Works (Traffic Signs, Pavement Marking, Kerbs, Pavers etc.)
- Electrical Works
- Etc. (As detailed in Drawings, Specifications and BOQ)
- 1.2 The successful bidder will be expected to complete the works within the time specified in Special Stipulations (Appendix-A).
- 2.1 Name of the Funding Source;

Funds provided by the Government of Sindh (ADP No.2314/2022-23)

2.1 Amount and Type of Financing/Scheme Cost and Allocated Funds.

Provincial ADP 2022-23, Cost/Allocation Rs. 439.157 million

c Bidders:

Delete IB Clause 3.1c(i) and replace with following National of Islamic Republic of Pakistan

Add following IB Clause 3.2

Qualification of Bidder

To be qualified for award of the Contract, bidders shall provide evidence satisfactory to the Procuring Agency of their capability and adequacy of resources to carry out the Contract effectively. Bids shall include the following documentation and information on the relevant Forms provided in Appendix M to Bid.

- (a) copies of original documents defining the constitution or legal status, place of registration and principal place of business; written power of attorney of the signatory of the Bid to commit the bidder.
- (b) total annual turnover in the civil works construction business expressed as total of payment certificates for works performed in each of the last three year;
- (c) performance as prime contractor, management contractor, or proportionately as member of a joint venture or subcontractor, on works of similar nature and complexity over the last three years, and details of other work in hand and contractual commitments.
- (d) major items of Contractor"s Equipment proposed for carrying out the Contract;
- (e) the qualifications and experience of key personnel for administration and execution of the Contract, both on and off site;
- (f) any proposals for subcontracting elements of the Works such that the total of subcontracting should not be more than 30 percent of the Bid Price;
- (g) reports on the financial standing of the bidders including profit and loss statements, balance sheets and auditor"s reports for the past three years, and an estimated financial projection for the next two years;
- (h) evidence of access to lines of credit and availability of other financial resources;
- (i) authority to seek references from the bidder"s bankers;
- (j) information regarding any litigation or arbitration resulting from contracts executed by the bidder in the last three years or currently under execution. The information shall include the names of the parties concerned, the disputed amount, cause of litigation, and matter in dispute;

- (k) information regarding historic non performance and black listing of the bidder by government, semi government, autonomous bodies, private parties; and
- (l) proposal of work methods and program, in sufficient detail to demonstrate the adequacy of the bidder"s proposals to meet the technical specifications and the completion time referred to in Appendix A to bid.

Bid submitted by a joint venture of two of more firms as partners shall comply with the following requirements:

- (a) the Bid shall include all the information listed in Sub-Clauses 3.2 (a) to (e) and (g) to (k) above for each joint venture partner and 3.2 (f) and (l) for the joint venture;
- (b) the Bid, and in case of a successful Bid, the Form of Agreement shall be signed so as to be legally binding on all partners;
- (c) one of the partners shall be nominated as being in charge, and this authorization shall be evidenced by submitting a power of attorney signed by legally authorized signatories of all the partners;
- (d) the partner in charge shall be authorized to incur liabilities and receive instruction for and on behalf of any and all partners of the joint venture, and the entire execution of the Contract, including payment, shall be done exclusively with the partner in charge;
- (e) all partner of the joint venture shall be liable jointly and severally for the execution of the Contract in accordance with the Contract terms, and a statement to this effect shall be included in the authorization mentioned under © above, as well as in the Form of Bid and in the Form of Agreement (in case of a successful Bid); and
- (f) a copy of the Joint Venture Agreement entered into by all partners shall be submitted with the bid. Alternatively, a Letter of Intent to execute a Joint Venture Agreement in the event of a successful bid shall be signed by all partners and submitted with the bid, together with a copy of the proposed Agreement.

For the purposes of this particular Contract, bidders shall meet the minimum qualifying criteria set forth at the end of Bidding Data.

The figures for each of the partners of a joint venture shall be added together to determine the bidder"s compliance with the minimum qualifying criteria set out in this Sub-Clause 3.2 above and in Evaluation & Qualification Criteria.

The qualifications, capacity, and resources of proposal subcontractors will not be taken into account in assessing those of individual or joint venture bidders, unless they are named specialist subcontractors and the scope of their specialized participation in the Works is clearly defined in the bid.

Refer Evaluation & Qualification Criterial provided at the end of Bidding Data. To establish its qualifications to perform the Contract in accordance with Evaluation and Qualification Criteria the Bidder shall provide the information requested in the corresponding information forms included in Appendix M along with information required in this Sub-Clause 3.2.

8.1 Time limit for clarification:

The written clarification should reach the addressee of the NIT on any working day but not later than 5 working days prior to last date of bid submission.

10.1 Bid language:

Bid language is English

Delete whole Clause 11 and replace with following:

- 11.1 The Bidder shall comprise two envelopes submitted simultaneously, one called the Technical Bid containing the documents listed in Clause 11.1a and the other the Price Bid containing the documents listed in Clause 11.1b, both envelopes enclosed together in an outer single envelop.
- 11.1a The Technical Bid shall comprise the following:
 - i Form of Technical Bid
 - ii Appendices to Bid except Appendix D and Appendix J.
 - iii Bid Security in accordance with Clause 15;
 - iv Alternative bids, if permissible, in accordance with Clause 16;
 - Written confirmation authorizing the signatory of the Bid to commit the Bidder, in accordance with Clause 18;
 - vi Documentary evidence in accordance with Clause 3.2 establishing the Bidder"s qualifications to perform the contract;
 - vii The Bidder shall furnish, as part of the Technical Bid, a Technical Proposal including a statement of work methods, equipment, personnel, schedule and any other information as stipulated in Appendices, in sufficient detail to demonstrate the adequacy of the Bidders" proposal to meet the work requirements and the completion.
- 11.1b The Price Bid shall comprise the following:
 - i Form of Price Bid
 - ii Completed Price Bill of Quantities (Appendix D), in accordance with Clause 11.1c and Clause 12,
- 11.1c The Forms of Technical Bid and Price Bid, and all documents listed under Clause 11.1a and 11.1b, shall be prepared using the relevant form furnished in Appendix D to M. The forms must be completed without any alterations to the text, and no substitutes shall be accepted. All blank spaces shall be filled in with the information requested.

Bidders to quote entirely in Pak. Rupee

The currency of Bid is Pakistan Rupee (PKR). All payment will be made in PKR only.

IB Clause 13.2 is not applicable

14.1 Period of Bid Validity:

Period of Bid Validity shall be 90 days

15.1 Amount of Bid Security:

The amount of the Bid Security shall be 5% of the Bid Price.

16.1 Alternate Proposals/Bid

Alternative bids is not permitted, Alternative times for completion is not permitted, Alternative technical solutions is not permitted for any part of the Works

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

At the Office of Superintending Engineer, KDA Room No.406, 4th Floor Civic Centre, Gulshan-e-Iqbal Karachi.

Date: (in case of any quarry will be informed 3 days prior in writing)

Delete Sub-Clause 18.1 and 18.2 and replace with following:

The Bidder shall prepare one original of the Technical Bid and one original of the Price Bid comprising the Bid as described in IB Clause 11 and clearly mark it "ORIGINAL"

- TECHNICAL BID" and "ORIGINAL - PRICE BID". <u>Both then included in Single Envelope to be submitted.</u>

The original and all copies of the Bid shall be typed or written in indelible ink and shall be signed by a person duly authorized to sign on behalf of the Bidder. This authorization shall consist of a written confirmation as specified below 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 signed or initialed by the person signing the bid.

The written confirmation of authorization to sign on behalf of the Bidder shall consist of:

- (a) Power of Attorney on Judicial Paper duly attested by Notary Public; and
- (b) Bids submitted by an existing or intended JV; shall include an undertaking signed by all parties (i) stating that all parties shall be jointly and severally liable, and (ii) nominating a Representative who shall have the authority to conduct all business for and on behalf of any and all the parties of the JV during the bidding process and, in the event the JV is awarded the Contract, during contract execution.
- 18.4 Number of copies of the bid to be completed and returned:

Original + One Copy

Delete Sub-Clause 19.1 and replace with following:

19.1 Bidders may always submit their bids by mail or by hand. Procedures for submission, sealing and marking are as follows:

Bidders submitting bids by mail or by hand shall enclose the original of the Technical Bid, the original of the Price Bid, and each copy of the Technical Bid and each copy of the Price Bid, in separate sealed envelopes, duly marking the envelopes as "ORIGINAL – TECHNICAL BID", "ORIGINAL – PRICE BID" and "COPY NO... – TECHNICAL BID" and "COPY NO... – PRICE BID". These envelopes, the first containing the originals and the others containing copies, shall then be enclosed in one single envelope per set.

19.2 (a) Procuring Agency's address for the purpose of bid submission:

Superintending Engineer, Room No.406, 4th Floor Civic Centre, Gulshan-e-Iqbal Karachi.

(b) Name and Identification Number of the Contract:

Construction / Rehabilitation of Road from 4-K Chowrangi North Karachi to Gulshan-e-Maymar Yousuf Goth, Karachi 2314/2022-

20.1 (a) Deadline for submission of bids:

Date: As per Invitation for Bid

Time: As per Invitation for Bid

(b) Venue, time, and date of bid opening:

Venue: As per Invitation of Bid

Date: As per Invitation for Bid

Time As per Invitation for Bid

Delete Sub-Clause 23.1 and replace with following:

The Procuring Agency shall open the Technical Bids in public at the address, date and time specified in the Invitation for bids in the presence of Bidders designated representative and anyone who choose to attend. The Price Bids will remain unopened and will be held in custody of the Procuring Agency until the specified time of their opening.

Delete Sub-Clause 23.3 and replace with following:

All other envelopes holding the Technical Bids 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;
- (d) any other details as the Procuring Agency may consider appropriate.

Only Technical Bids and alternative Technical Bids read out and recorded at bid opening shall be considered for evaluation. No Bid shall be rejected at the opening of Technical Bids except for late bids, in accordance with Clause 21.

Delete Sub-Clause 23.4 and replace with following:

At the end of the evaluation of the Technical Bids, the Procuring Agency will invite bidders who have submitted substantially responsive Technical Bids and who have been determined as being qualified for award to attend the opening of the Price Bids. The date, time, and location of the opening of Price Bids will be advised in writing by the Procuring Agency. Bidders shall be given reasonable notice for the opening of Price Bids.

And following Sub-Clause 23.5 to 23.8

The Procuring Agency will notify Bidders in writing who have been rejected on the grounds of their Technical Bids being substantially non-responsive to the requirements of the Bidding Document and return their Price Bids unopened.

The Procuring Agency shall conduct the opening of Price Bids of all Bidders who submitted substantially responsive Technical Bids, in the presence of Bidders" representative who choose to attend at the address, date and time specified by the Procuring Agency. The Bidder"s representatives who are present shall be requested to sign a register evidencing their attendance.

All envelopes containing Price Bids 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 Bid Prices, including any discounts and alternative offers if permitted; and
- (d) any other details as the Procuring Agency may consider appropriate

Only Price Bids, discounts and alternative offers read out and recorded during the opening of Price Bids shall be considered for evaluation. No Bid shall be rejected at the opening of Price Bids.

The Procuring Agency shall prepare a record of the opening of Price Bids that shall include, as a minimum: the name of the Bidder, the Bid Price, any discounts, and alternative offers. The Bidders" representatives who are present shall be requested to sign the record.

Add following paragraph at the end of Sub-Clause 26.1

The Procuring Agency shall examine the Technical Bid to confirm that all documents and technical documentation requested in Clause 11 have been provided and to determine the completeness of each documents submitted.

The Procuring Agency shall confirm that the following documents and information have been provided in the Technical Bid. If any of these documents or information is missing, the offer shall be rejected.

- i. Letter of Technical Bid:
- ii. Written confirmation of authorization to commit the Bidder;
- iii. Bid Security, if applicable; and
- iv. Technical Proposal in accordance with IB 11
- 28.4 If the successful bidder failed to submit Performance Security of increased amount within fourteen (14) days of demand by the PA, his bid shall be cancelled and his bid security shall be forfeited.
- 32.1 Standard form and amount of Performance Security acceptable to the procuring agency:

The performance security will be in the form of a "unconditional, irrevocable and acceptable bank guarantee" in the amount of 5% (Five percent) of the Accepted Contract Amount acceptable to the Procuring Agency in the attached format.

Validity of performance security

The Performance Security shall be valid for a period 90 days after the date of issue of Performance certificate.

Stamp duty

The Contract will be executed on a non-judicial stamp paper of the value @ 0.35% of the contract value. The cost of the stamp duty shall be borne by the successful bidder.

[0.35% may vary depending upon the rules applicable at the time of signing the Contract]

EVALUATION/ QUALIFICATION CRITERIA

Evaluation/Qualification Criteria.

1. Evaluation/Qualification Criteria: Based on Pass/Fail system.

Mandatory Provisions/Eligibility

(i) **Registration with PEC**:

Bidders must possess valid registration certificate of PEC in the category C2 or above and in discipline (CE01, CE09, CE10) (Attach PEC registration certificate).

Must attach Valid/Registration with Pakistan Engineering Council in category and discipline/code define as above for the year 2022-2023. (Submission of both sides of PEC Certificate)

Single Entity: Must Meet

Joint Venture: Lead Member must meet, other members (C3)

(ii) Registration with FBR for Income Tax and SRB Sales Tax Department:

Bidders must possess valid registration certificate from income tax authority (NTN). (Attach NTN certificate) and certificate of registration from Sindh Revenue Board (SRB).

(iii) Valid professional Tax Certificate/Receipt of Payment:

Single Entity: Must Meet

Joint Venture: Lead Member must meet, other members must meet

(iv) Conflict of Interest:

As per SPPRA Rule 2 (1) (l), Bidder shall not have the Conflict of Interest. The "Conflict of Interest means:

- a) where a contractor, supplier or consultant provides, or could provide, or could be perceived as providing biased professional advice to a procuring agency to obtain an undue benefit for himself or those affiliated with him;
- b) receiving or giving any remuneration directly or indirectly in connection with the assignment except as provided in the contract;
- any engagement in consulting or other procurement activities of a contractor, consultant or service provider that conflicts with his role or relationship with the procuring agency under the contract;
- d) where an official of the procuring agency engaged in the procurement process has a financial or economic interest in the outcome of the process of procurement, in a direct or an indirect manner;"

(Attach Affidavit)

Single Entity: Must Meet

Joint Venture: Lead Member must meet, other members must meet

(v) Government Owned Enterprises:

In accordance with SPPRA Rule 29(2) "Government owned enterprises or institutions may participate only if they can establish that they are;

- a) legally and financially autonomous; and
- b) operate under commercial law;

Provided that where government owned universities or research centers in the country are of a unique and exceptional nature, and their participation is critical to project implementation, they may be allowed to participate."

Single Entity: Must Meet

Joint Venture: Lead Member must meet, other members must meet

(vi) Blacklisting:

Bidder is not black listed pursuant to Instructions to Bidders and SPPRA Rule 2 (1) (i). In accordance with SPPRA Rule 2 (1) (i), Blacklisting means:

"Barring a bidder, contractor, consultant or supplier from participating in any future procurement proceedings by the procuring agency" (Attach Affidavit)

Single Entity: Must Meet

Joint Venture: Lead Member must meet, other members must meet

(vii) Litigation History:

All pending litigation shall in total not represent more than fifty (50) % of the Bidder's net worth and shall be treated as resolved against the Bidder. (Provide details or attach Affidavit in case of not applicable)

Single Entity: Must Meet

Joint Venture: Lead Member must meet, other members must meet

(viii) History of Non-Performing Contracts:

All Non-performance of a contract did not occur within the last 5 years prior to the deadline for bid submission based on all information on fully settled disputes or litigation. A fully settled dispute or litigation is one that has been resolved in accordance with the Dispute Resolution Mechanism under the respective contract and where all appeal instances available to the applicant have been exhausted. (Provide details or attach Affidavit in case of not applicable)

The past performance of the applicant on all completed and ongoing projects may also be checked in coordination with other government departments.

Single Entity: Must Meet

Joint Venture: Lead Member must meet, other members must meet.

(ix) Failure to Sign Contracts:

Not being under execution of a Bid Securing Declaration for last 5 years. (Provide details or attach Affidavit in case of not applicable)

Single Entity: Must Meet

Joint Venture: Lead Member must meet, other members must meet

Financial Situation

(i) Average Annual Construction Turnover: PKR 880 million

(Minimum average annual construction turnover as mentioned above, calculated as total certified payments received for contracts in progress or completed, within the last three (03) years, Submit Audited Balance Sheet of the Bidder)

Single Entity: Must Meet

Joint Venture: Lead Member Must Meet 75%, other members must meet 25% each member

(ii) Cash Flow Requirement: PKR 440 million

(Minimum cash flow as mentioned above, calculated as total current assets, liquid assets, unencumbered real assets, and other financial means, net of current commitments. Submit Audited Balance Sheet of the Bidder)

Single Entity: Must Meet

Joint Venture: Lead Member Must Meet 75%, other members must meet 25% each member

General Construction Experience

Bidder shall be in business of construction at least for last 05 years.

Experience under construction contracts in the role of contractor, subcontractor, or management contractor for at least the last five [05] years prior to the bid submission deadline, and with activity in at least nine (9) months in each year. (Attach Articles of Incorporation / Documents of Constitution or documents of registration of the legal entity. In case of JV, letter of intent to form JV or JV agreement.)

Single Entity: Must Meet

Joint Venture: Lead Member Must Meet, other members 3 years

Specific Construction Experience

Participation as contractor or subcontractor, in at least two [02] contracts within the last five [5] years, with a value as mentioned below, that have been successfully and substantially completed and that are similar to the proposed works. The similarity shall be based on the physical size, complexity, methods / technology or other characteristics.

(i) Have completed Two (2) similar assignments having cost of each 440 Million Rupees in the last five (5) years.

(Submit verified completion certificates)

Single Entity: Must Meet

Joint Venture: Lead Member Must Meet 75%, other members meet 25% of contract value

Key Personnel Qualification & Experience

The Bidder must demonstrate that it has the personnel for the key positions that meet the following requirements

(i) **Project Manager:** BE (Civil) with 15 years experience (10

years relevant experience).

(ii) **Electrical Engineer:** BE (Elect.) with 10 years experience.

(iii) **Planning Engineer:** BE (Civil) with 10 years experience.

(iv) **Contracts Engineer:** BE (Civil) with 10 years experience.

(v) **Structures Engineer:** BE (Civil) with 10 years experience with 5

years relevant experience.

(vi) **Highway Engineer:** BE (Civil) with 10 years experience with 5

years relevant experience.

(vii) Material Engineer: BSc. (Geology) with 10 years experience

(viii) **Environmental Expert:** BE (Civil) with 5 years experience.

(ix) Social Development Specialist: BSc (Social Science) with 5 years

experience.

(x) **Health & Safety Expert:** BE (Civil) OR Environmental Science. At

least 3 years post qualification experience.

(For all Engineer"s submit PEC registration certificate and CVs of personnel be attached as per form provided in Appendix M).

Single Entity: Must Meet

Joint Venture: Must meet collectively

Plant & Equipment

The Bidder must demonstrate that it has the key equipment listed hereafter (Submit Ownership Document/Rental Agreement/Lease Document)

Sr. No.	Description of Equipment	Capacity & Horse Power	Minimum Requirement (Qty. in No.)
1	Bulldozer	200 HP	2
2	Motor Grader	140 HP	3
3	Vibratory Roller	10 - 12 Ton	3
4	Pneumatic Roller	18 - 21 Ton	3
5	Dump Truck	18 Ton	10
6	Excavator	105 HP	2
7	Asphalt Paver	145 HP	2
8	Concrete Batching Plant	30 Cum Per Hr	1
9	Concrete Transit Mixer	6 Cum	2
10	Concrete Vibrator	5 HP	2
11	Concrete Mixer	1 Cm	2
12	Water Pump	4" Delivery	2
13	Concrete Pump		2

Note: Total equipment available with the bidder is to be listed along with its current mobilization on on-going projects. The Bidder shall provide further details of proposed items of equipment using the relevant Form in Appendix M.

Single Entity: Must Meet

Joint Venture: Must meet collectively

FORM OF BID AND APPENDICES TO BID

FORM OF TECHNICAL BID

eference No
(Name of Contract/Work)
Having examined the bidding documents including Instructions to Bidders, Bidding Data, and Conditions of Contract, Specifications, Drawings and Bill of Quantities and
Addenda Nos
sum as may be ascertained in accordance with the said conditions.
We/I understand that all the Appendices attached hereto form part of this bid.
As security for due performance of the undertakings and obligations of this bid, we/I submit herewith a bid security in the amount of Rupees(Rs) drawn in your favour or made payable to procuring agency and valid for a period ofdays beginning from the date, bid is opened.
We/I undertake, if our bid is accepted, to commence the works and to complete the whole of the works comprised in the contract within the time stated in Appendix-A to Bid.
We/I agree to abide by this bid for the period ofdays from the date fixed for opening the same and it shall remain binding upon us and may be accepted at any time before the expiration of that period.
Unless and until a formal Agreement is prepared and executed, this bid, together with your written acceptance thereof, shall constitute a binding contract between us.
We do hereby declare that the bid is made without any collusion, comparison of figures or arrangement with any other bidder for the works.
We understand that you are not bound to accept the lowest or any bid you may receive.
We undertake, if our/my bid is accepted, to execute the Performance Security referred to in Clause 10 of Conditions of Contract for the due performance of the Contract.
We confirm, if our bid is accepted, that all partners of the joint venture shall be liable

jointly and severally for the execution of the Contract and the composition or the

constitution of the joint venture shall not be altered without the prior consent of the procuring agency. (Please delete this in case of Bid form a single bidder)

in	on	capacity behalf of					sign this	Bids		and day
of		20								
			Signature:							
		(Name	of Bidder	in Block C	apitals) (Se	eal)				
Addı	ress:									
Witn	ess:									
Sign	ature: _				-					
Nam	e:				_					
Addı	ess:									
									_	

Appendix-A to Bid

SPECIAL STIPULATIONS

Particular Conditions of Contract- Part A

	Description	General Conditions Clauses	Stipulations
1	Employer"s name and address	1.1.2.2 & 1.3	Office of Superintending, KDA Room No.406, 4th Floor Civic Centre, Gulshan-e- Iqbal Karachi.
2	Engineer"s name and address	1.1.2.4 & 1.3	Project Engineer communicated at later stage.
3	Sections	1.1.5.6	Not Applicable
4	Electronic transmission systems	1.3	N/A
5	Governing Law	1.4	The Laws of Islamic Republic of Pakistan.
6	Ruling language	1.4	English
7	Language for communications	1.4	English
8	Time for access to the Site	2.1	Within seven (07) days after Commencement Date
9	Engineer representing Consulting Firm hired by the procuring agency to issue variation in case of emergency	3.1	Up to 1% of the contract price stated in the Letter of Acceptance
10	Amount of Performance Security	4.2	The performance security will be in the form of a "unconditional,

	Description	General Conditions Clauses	Stipulations
			irrevocable and acceptable bank guarantee" in the amount of 5% (Five percent) of the contract price stated in the Letter of Acceptance.
11	Subcontract	4.4	The aggregate amount of the Works subcontracted shall not exceed 30% of the Contract Price.
12	Normal working hours	6.5	8 hrs a day and 6 days a week.
13	Time for Commencement	8.1	Within 07 days from the date of receipt of Engineer"s Notice to Commence, this shall be issued within fourteen (14) days after signing of Contract Agreement.
14	Time for Completion	8.2	730 days from the date of receipt of Engineer"s Notice to
15	Time for Furnishing Programme	8.3	Within 28 days from the date of receipt of Letter of Acceptance.
16	Revised Programme	8.3	Revised Programme to be submitted within 14 days of the Engineer"s notice.
17	Delay damages for the Works	8.7 & 14.15(b)	0.1% of the Contract Price per day, and
			For Interim Delay damages 0.05% of the Contract price per day
			Also, other charges mentioned in Special/Particular Conditions of Contract
18	Maximum amount of delay damages	8.7& 14.15(b)	10% of the final Contract Price & For Interim Delay damages 5% of
			the Contract price per day
			Also, other charges mentioned in Part B, Particular Conditions of Contract
19	Defects Liability Period	11.1	365 days from the effective date of Taking Over Certificate.
20	Provisional Sums	13.5.(b)(ii)	15%

	Description	General Conditions Clauses	Stipulations
21	Advance payment	14.2	10% Percentage of the Accepted Contract Amount excluding Provisional Sum and Day work) payable in PKR:
			First Instalment: 50% of total Advance Payment shall be made after fulfilling all the requirements provided in Conditions of the Contract.
			Second Instalment: Remaining 50%, on mobilization of Plant, equipment and other resources at site by the Contractor to the satisfaction of the Engineer.
23	Repayment amortization rate of advance payment	14.2(b)	From five consecutive IPCs in Starting from third IPC in equal instalments including 10% per annum interest.
24	Percentage of Retention	14.3	10 % of the amount of Interim/Running Payment Certificate.
25	Limit of Retention Money	14.3	5 % of Contract Price stated in the Letter of Acceptance.
26	Plant and Materials	14.5	Not Applicable
27	Minimum Amount of Interim Payment Certificates	14.6	3 % of the Accepted Contract Amount.
28	Payment Time	14.7	56 days.
29	Maximum total liability of the Contractor to the Employer	17.6	The product of two (02) times the Accepted Contract Amount
30	Periods for submission of insurance: a. evidence of insurance. b. relevant policies.	18.1	14 days 28 days

	Description	General Conditions Clauses	Stipulations
31	Maximum amount of deductibles for insurance of the Employer's risks	18.2(d)	10% of the Accepted Contract Amount
32	Minimum amount of Insurance Cover	18.1, 18.2, 18.3 and 18.4	Type of cover The Works Amount of cover The sum stated in the Letter of Acceptance plus fifteen percent (15%) Type of cover Contractor,,s Equipment: Amount of cover Full replacement cost plus fifteen percent (15%) Type of cover Third Party-injury to persons and
			The Third Party Compensation Policy must contain following conditions of indemnification per occurrence with the number of occurrence unlimited: i) in case of death, Pak Rs. 1,000,000/= per person ii) in case of major injury, Pak Rs. 500,000/= per person iii) in case of minor injury, Pak Rs. 100,000/= per person iv) in case of damage to property, full amount of repair/replacement as the case may be. Workers: i) in case of death, Pak Rs. 1,000,000/= per person ii) in case of major injury, Pak

	Description	General Conditions Clauses	Stipulations
			Rs. 500,000/= per person iii) in case of minor injury, Pak Rs. 100,000/= per person
			Other cover:
			Contractor"s All Risk Policy
			(In each case name of insured is Contractor and Procuring Agency)
33	Date by which the Dispute Board (DB) shall be appointed	20.2	28 days after the Commencement date
34	The DB shall be comprised of	20.2	Three Members
35	List of potential DB sole members	20.2	None
36	Appointment (if not agreed) to be made by	20.3	Pakistan Engineering Council
37	Rules of arbitration	20.6(a)	Rules and Provisions of Arbitration Act 1940 of Islamic Republic of Pakistan enforced for the time being. The Place of Arbitration shall be Karachi.

FOREIGN CURRENCY REQUIREMENTS

1.	The bidder may indicate herein below his requirements of foreign currency (if any), with reference to various inputs to the works.				
2.	Foreign Currency Requirement as por Provisional Sums%.	ercentage of the bid price excluding			
3.	Table of Exchange Rates				
	Unit of Currency	Equivalent in Pak. Rupees			
	Australian Dollar				
	Euro				
	Japanese Yen				
	U.K. Pound				
	U.S. Dollars				

PRICE ADJUSTMENT UNDER CLAUSE 13.8 OF CONDITIONS OF CONTRACT

A. Weight ages or coefficients are used for price adjustment.

The source of indices and the weightages or coefficients for use in the adjustment formula under Clause 13.8 shall be as follows:

Cost	Description	Weight ages	Applicable index		
Element	_				
1	2	3	4		
(i)	Fixed Portion	0.350			
(ii)	Local Labour		Government of Pakistan (GoP)		
			Federal Bureau of Statistics (FBS)		
			Monthly Statistical Bulletin.		
(iii)	High Speed Diesel				
	(HSD)		-do-		
(iv)	Cement – in bags				
			-do-		
(v)	Reinforcing Steel				
			-do-		
(vi)	Pre-Stressing				
	Strands		-do-		
(vii)	Bitumen				
			-do-		
(viii)					
	Total	1.000			

Notes:

- 1) Indices for "(ii)" to "(vii)" are taken from the Government of Pakistan Federal Bureau of
 - Statistics, Monthly Statistical Bulletin. The base cost indices or prices shall be those applying 15 days prior to the latest day for submission of bids. Current indices or prices shall be those applying 28 days prior to the last day of the billing period.
- 2) Any fluctuation in the indices or prices of materials other than those given above shall not be subject to adjustment of the Contract Price.
- 3) Fixed portion shown here is for typical road project, procuring agency to determine the weightage of Fixed Portion considering only those cost elements having cost impact of seven (7) percent or more on his specific project.

B When Escalation is allowed on the materials only.

Price adjustment on following items shall be allowed:

Cost Element	Description	Base Price	Applicable Index
1	2	3	4
(i)	Cement – in bags (50kg bag)		GoP, Federal Bureau of Statistics, Monthly Bulletin
(ii)	Reinforcing Steel Steel Billet (150 x 150mm)		Pakistan Steel Mill
(iii)	Bitumen 60/70 in Bulk 80/100 in drums		National Refinery
(iv)	Brick		GoP, Federal Bureau of Statistics, Monthly Bulletin
	Total four items		

Notes:

- 1. The base prices shall be those applying 7 days prior to the latest day for submission of bids. Current indices or prices shall be those applying last 28 days prior to the last day of the billing period.
- 2. Any fluctuation in the prices of materials other than those given above shall not be subject to adjustment of the Contract Price.

Appendix-D to Bid

REFER PRICE BID

PROPOSED CONSTRUCTION SCHEDULE

Pursuant to Sub -Clause 8.2 of the General Conditions of Contract, the works shall be completed on or before the date stated in Appendix-A to Bid. The bidder shall provide as Appendix-E to Bid, the Construction Schedule 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 may meet procuring agency"s completion targets in days noted below and counted from the date of receipt of Engineer"s Notice to Commence (Attach sheets as required for the specified form of Construction Schedule):

METHOD OF PERFORMING THE WORK

[The bidder is required to submit a narrative outlining the method of performing the work.

The narrative should indicate in detail and include but not be limited to:

- 1. Organization Chart indicating head office and field office personnel involved in management and supervision, engineering, equipment maintenance and purchasing.
- 2. Mobilization at site, the type of facilities including personnel accommodation, office accommodation, provision for maintenance and for storage, communications, security and other services to be used.
- 3. The method of executing the works, the procedures for installation of equipment and machinery and transportation of equipment and materials to the site.

LIST OF MAJOR EQUIPMENT – RELATED ITEMS

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

Sr. No.	Description of Equipment	Capacity & Horse Power	Minimum Requirement	Proposed by the Bidder
1	Bulldozer	200 HP	2	
2	Motor Grader	140 HP	3	
3	Vibratory Roller	10 - 12 Ton	3	
4	Pneumatic Roller	18 - 21 Ton	3	
5	Dump Truck	18 Ton	10	
6	Excavator	105 HP	2	
7	Asphalt Paver	145 HP	2	
8	Concrete Batching Plant	30 Cum Per Hr	1	
9	Concrete Transit Mixer	6 Cum	2	
10	Concrete Vibrator	5 HP	2	
11	Concrete Mixer	1 Cm	2	
12	Water Pump	4" Delivery	2	
13	Concrete Pump		2	

Appendix-G to Bid

LIST OF MAJOR EQUIPMENT (SAMPLE)

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

CONSTRUCTION CAMP AND HOUSING FACILITIES

The Contractor in accordance with Clause 6 of the Conditions of Contract shall provide description of his construction camp's facilities and staff housing requirements.

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

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

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

LIST OF SUBCONTRACTORS

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

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

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

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Appendix-J to Bid

REFER PRICE BID

Appendix-K to Bid

ORGANIZATION CHART FOR THE SUPERVISORY STAFF AND LABOUR

(To be filled in by the bidder)

ES Management Strategies and Implementation Plans

(SE-MSIP)

The Bidder shall submit comprehensive and concise Environmental and Social Management Strategies and Implementation Plans (ES-MSIP) as required by ITB 11.1 (d) of the Bidding Data. These strategies and plans shall describe in detail the actions, materials, equipment, management processes etc. that will be implemented by the Contractor, and its subcontractors.

In developing these strategies and plans, the Bidder shall have regard to the ES provisions of the contract including the World Bank Environmental, Health, and Safety General Guidelines, ISO 45001 and those as may be more fully described here under:

Environmental, Social, Health and Safety Requirements

The Works' policy goal, as a minimum, should be stated to integrate environmental protection, occupational and community health and safety, gender, equality, child protection, vulnerable people (including those with disabilities), Sexual Exploitation and Abuse/ Sexual Harassment (SEA/SH), HIVIAIDS/COVID-19 awareness and prevention and wide stakeholder engagement in the planning processes, programs, and activities of the parties involved in the execution of the Works. The Employer is advised to consult with the World Bank to agree the issues to be included which may also address: climate adaptation, land acquisition and resettlement, indigenous people, etc. The policy should set the frame for monitoring, continuously improving processes and activities and for reporting on the compliance with the policy.

The policy shall include a statement that, for the purpose of the policy and/or code of conduct, the term "child" I "children" means any person(s) under the age of 18 years.

The policy should, as far as possible, be brief but specific and explicit, and measurable, to enable reporting of compliance with the policy in accordance with the Conditions of Contract.

As a minimum, the policy is set out to the commitments to:

- a) apply good international industry practice to protect and conserve the natural environment and to minimize unavoidable impacts;
- b) provide and maintain a healthy and safe work environment and safe systems of work;
- c) protect the health and safety of local communities and users, with particular concern for those who are disabled, elderly, or otherwise vulnerable;
- d) be intolerant of, and enforce disciplinary measures for illegal activities. To be intolerant of, and enforce disciplinary measures for gender-based violence, inhumane treatment, sexual exploitation, rape, sexual abuse, sexual activity with children, and sexual harassment:
- e) incorporate a gender perspective and provide an enabling environment where women and men have . equal opportunity to participate in, and benefit from, planning and development

of the Works;

- f) work co-operatively, including with end users of the Works, relevant authorities, contractors and local communities;
- g) engage with and listen to affected persons and organizations and be responsive to their concerns, with special regard for vulnerable, disabled, and elderly people;
- h) provide an environment that fosters the exchange of information, views, and ideas that is free of any fear of retaliation, and protects whistleblowers;
- i) minimize the risk of communicable diseases and to mitigate the effects of communicable diseases associated with the execution of the Works;

The policy should be signed by the senior manager of the Employer. This is to signal the intent that it will be applied rigorously.

MINIMUM CONTENT OF ES REQUIREMENTS

In preparing detailed specifications for ES requirements, the specialists should refer to and consider:

- project reports e.g. ESIA/ESMP/ESRs
- consent/permit conditions
- required standards including World Bank Group EHS Guidelines
- relevant international conventions or treaties etc., national legal and/or regulatory requirements and standards (where these represent higher standards than the WBG EHS Guidelines)
- relevant international standards e.g. WHO Guidelines for Safe Use of Pesticides
- relevant sector standards ·e.g. EU Council Directive 91/271/EEC Concerning Urban Waste Water Treatment
- grievance redress mechanism including types of grievances to be recorded and how to protect confidentiality e.g. of those reporting allegations of SEA.
- *SEA prevention and management.*

The detail specification for ES should, to the extent possible, describe the intended outcome rather than the method of working. The ES requirements should be prepared in manner that does not conflict with the relevant General Conditions of Contract and Particular Conditions of Contract.

PAYMENT FOR ES REQUIREMENTS

The payment for the delivery of ES requirements shall be a subsidiary obligation of the Contractor covered under the prices quoted for other Bill -of-Quantity items or activities. For example, normally the cost of implementing work place safe systems of work, including the measures necessary for ensuring traffic safety, shall be covered by the Bidder's rates for the relevant works.

Environmental, Social, Health and Safety (ESHS)

Metrics for Progress Reports

Metrics for regular reporting:

- a. environmental incidents or non-compliances with contract requirements, including contamination, pollution or damage to ground or water supplies;
- b. health and safety incidents, accidents, injuries that require treatment and all fatalities;
- c. interactions with regulators: identify agency, dates, subjects, outcomes (report the negative if none);
- d. status of all permits and agreements:
 - i. work permits: number required, number received, actions taken for those not received; ·
 - ii. status of permits and consents:
 - list areas/facilities with permits required (quarries, asphalt & batch plants), dates of application, dates issued (actions to follow up if not issued), dates submitted to resident engineer (or equivalent), status of area (waiting for permits, working, abandoned without reclamation, decommissioning plan being implemented, etc.);
 - list areas with landowner agreements required (borrow and spoil areas, camp sites), dates of agreements, dates submitted to resident engineer (or equivalent);
 - identify major activities undertaken in each area in the reporting period and highlights of environmental and social protection (land clearing, boundary marking, topsoil salvage, traffic management, decommissioning planning, decommissioning implementation);
 - for quarries: status of relocation and compensation (completed, or details of activities and current status in the reporting period).
- e. health and safety supervision:

Safety officer: number days worked, number of full inspections & partial inspections, reports to construction/project management; -

Number of workers, work hours, metric of PPE use (percentage of workers with full personal protection equipment (PPE), partial, etc.), worker violations observed (by type of violation, PPE or otherwise), warnings given, repeat warnings given, follow-up actions taken (if any);

f. worker accommodations:

- i. number of expats housed in accommodations, number of locals;
- ii. date of last inspection, and highlights of inspection including status of

accommodations' compliance with national and local law and good practice, including sanitation, space; etc.;

Actions taken to recommend/require improved conditions, or to improve conditions.

- g. Health services: provider of health services, information and/or training, location of clinic, number of non-safety disease or illness treatments and diagnoses (no names to be provided);
- h. gender (for expats and locals separately): number of female workers, percentage of workforce, gender issues raised and dealt with (cross-reference grievances or other sections as needed);

i. training:

- i. number of new workers, number receiving induction training, dates of induction training;
- ii. number and dates of toolbox talks, number of workers receiving Occupational Health and Safety (OHS), environmental and social training;
- iii. number and dates of communicable diseases (including STDs) sensitization and/or training, no. workers receiving training (in the reporting period and in the past); same questions for gender sensitization, flag person training.
- iv. number and date of SEA and SH prevention sensitization and/or training events, including number of workers receiving training on Code of Conduct for Contractor's Personnel (in the reporting period and in the past), etc.

j. environmental and social supervision:

- i. environmentalist: days worked, areas inspected and numbers of inspections of each (road section, work camp, accommodations, quarries, borrow areas, spoil areas, · swamps, forest crossings, etc.), highlights of activities/findings (including violations of environmental and/or social best practices, actions taken), reports to environmental and/or social specialist/construction/site management;
- ii. sociologist: days worked; number of partial and full site inspections (by area: road section, work camp, accommodations, quarries, borrow areas, spoil areas, clinic, HIV/AIDS center, community centers, etc.), highlights of activities (including violations of environmental and/or social requirements observed, actions taken), reports to environmental and/or social specialist/construction/site management; and
- iii. community liaison person(s): days worked (hours community center open), number of people met, highlights of activities (issues raised, etc.), reports to environmental and/or social specialist /construction/site management.

- k. Grievances: list new grievances (e.g. number of allegations of SEA and SH) received in the reporting period and number of unresolved past grievances by date received, complainant's age and sex, how received, to whom referred to for action, resolution and date (if completed), data resolution reported to complainant, any required follow-up (Cross-reference other sections as needed.
 - i. Worker grievances;
 - ii. Community grievances
- 1. Traffic, road safety and vehicles/equipment:
 - i. traffic and road safety incidents and accidents involving project vehicles & equipment: provide date, location, damage, cause, follow-up;
 - ii. traffic and road safety incidents and accidents involving non-project vehicles or property (also reported under immediate metrics): provide date, location, damage, cause, follow-up;
 - iii. overall condition of vehicles/equipment (subjective judgment by environmentalist); non-routine repairs and maintenance needed to improve safety and/or environmental performance (to control smoke, etc.).
- m. Environmental mitigations and issues (what has been done):
 - i. dust: number of working bowsers, number of waterings/day, number of complaints, warnings given by environmentalist, actions taken to resolve; highlights of quarry dust control (covers, sprays, operational status); % of rock/spoil lorries with covers, actions taken for uncovered vehicles;
 - ii. erosion control: controls implemented by location, status of water crossings, environmentalist inspections and results, actions taken to resolve issues, emergency repairs needed to control erosion/sedimentation;
 - iii. quarries, borrow areas, spoil areas, asphalt plants, batch plants: identify major activities undertaken in the reporting period at each, and highlights of environmental and · social protection: land clearing, boundary marking, topsoil salvage, traffic management, decommissioning planning, decommissioning implementation;
 - iv. blasting: number of blasts (and locations), status of implementation of blasting plan (including notices, evacuations, etc.), incidents of off-site damage or complaints .(cross-reference other sections as needed);
 - v. spill cleanups, if any: material spilled, location, amount, actions taken, material disposal (report all spills that result in water or soil contamination;
 - vi. waste management: types and quantities generated and managed, including amount taken offsite (and by whom) or reused/recycled/disposed on-site;
 - vii. details of tree plantings and other mitigations required undertaken in the reporting period;
 - viii. details of water and Swamp protection mitigations required undertaken in the reporting period .

n. compliance:

- i. compliance status for conditions of all relevant consents/permits, for the Work, including quarries, etc.): statement of compliance or listing of issues and actions taken (or to be taken) to reach compliance;
- ii. compliance status of C-ESMP/ESIP requirements: statement of compliance or listing of issues and actions taken (or to be taken) to reach compliance
- iii. compliance status of SEA and SH prevention and response action plan: statement of compliance or listing of issues and actions taken (or to be taken) to reach compliance
- iv. compliance status of Health and Safety Management Plan re: statement of compliance or listing of issues and actions taken (or to be taken) to reach compliance

Other unresolved issues from previous reporting periods related to environmental and social: continued violations, continued failure of equipment, continued lack of vehicle covers, spills not dealt with, continued compensation or blasting issues, etc. Cross•reference other sections as needed

Code of Conduct for Contractor's Personnel (ES) Form

Note to the Bidder:

The minimum content of the Code of Conduct form as set out by the Employer shall not be substantially modified. However, the Bidder may add requirements as appropriate, including to take into account Contract-specific issues/risks.

The Bidder shall initial and submit the Code of Conduct form as part of its bid.

CODE OF CONDUCT FOR CONTRACTOR'S PERSONNEL

We are the Contractor, [enter name of Contractor]. We have signed a contract with [enter name of Employer] for [enter description of the Works]. These Works will be carried out at [enter the Site and other locations where the Works will be carried out]. Our contract requires us to implement measures to address environmental and social risks related to the Works, including the risks of sexual exploitation, sexual abuse and sexual harassment.

This Code of Conduct is part of our measures to deal with environmental and social risks related to the Works. It applies to all our staff, laborers and other employees at the Works Site or other places where the Works are being carried out. It also applies to the personnel of each subcontractor and any other personnel assisting us in the execution of the Works. All such persons are referred to as "Contractor's Personnel" and are subject to this Code of Conduct.

This Code of Conductidentifies the behavior that we require from all Contractor's Personnel.

Our workplace is an environment where unsafe, offensive, abusive or violent behavior will not be tolerated and where all persons should feel comfortable raising issues or concerns without fear of retaliation.

REQUIRED CONDUCT

Contractor's Personnel shall:

- 1. carry out his/her duties competently and diligently;
- 2. comply with this Code of Conduct and all applicable laws, regulations and other requirements, including requirements to protect the health, safety and well-being of other Contractor's Personnel and any other person;
- 3. maintain a safe working environment including by:
 - a. ensuring that workplaces, machinery, equipment and processes under each person's control are safe and without risk to health;
 - b. wearing required personal protective equipment;
 - c. using appropriate measures relating to chemical, physical and biological substances and agents; and

- d. following applicable emergency operating procedures.
- e. modifying work methodology to remove/mitigate work hazards.
- 4. report work situations that he/she believes are not safe or healthy and remove himself/herself from a work situation which he/she reasonably believes presents an imminent and serious danger to his/her life or health;
- 5. treat other people with respect, and not discriminate against specific groups such as women, people with disabilities, migrant workers or children;
- 6. notengageinSexualHarassment,whichmeansunwelcomesexual advances,requestsforsexual favors, and other verbal or physical conduct of a sexual nature with other Contractor's or Employer's Personnel;
- 7. not engage in Sexual Exploitation, which means any actual or attempted abuse of position of vulnerability, differential power or trust, for sexual purposes, including, but not limited to, profiting monetarily, socially or politically from the sexual exploitation of another;
- 8. not engage in Sexual Abuse, which means the actual or threatened physical intrusion of a sexual nature, whether by force or under unequal or coercive conditions;
- 9. not engage in any form of sexual activity with individuals under the age of 18, except in case of pre-existing marriage;
- 10. complete relevant training courses that will be provided related to the environmental and social aspects of the Contract, including on health and safety matters, and Sexual Exploitation and Abuse(SEA), and Sexual Harassment(SH);
- 11. report violations of this Code of Conduct; and
- 12. not retaliate against any person who reports violations of this Code of Conduct, whether to us or the Employer, or who makes use of the grievance mechanism for Contractor's Personnel or the project's Grievance Redress Mechanism.

RAISING CONCERNS

If any person observes behavior that he/she believes may represent a violation of this Code of Conduct, or that otherwise concerns him/her, he/she should raise the issue promptly. This can be done in either of the following ways:

- 1. Contact [enter name of the Contractor's Social Expert with relevant experience in handling gender-based violence, or if such person is not required under the Contract, another individual designated by the Contractor to handle these matters] in writing at this address [] or by telephone at [] or in person at []; or
- 2. Call [] to reach the Contractor's hotline (if any) and leave a message.

The person's identity will be kept confidential, unless reporting of allegations is mandated by the country law. Anonymous complaints or allegations may also be submitted and will be given all due and appropriate consideration. We take seriously all reports of possible misconduct and will investigate and take appropriate action. We will provide warm referrals to service providers that may help support the person who experienced the alleged incident, as appropriate.

There will be no retaliation against any person who raises a concern in good faith about any behavior prohibited by this Code of Conduct. Such retaliation would be a violation of this Code of Conduct.

CONSEQUENCES OF VIOLATING THE CODE OF CONDUCT

Any violation of this Code of Conduct by Contractor's Personnel may result in serious consequences, up to and including termination and possible referral to legal authorities.

FOR CONTRACTOR'S PERSONNEL:

I have received a copy of this Code of Conduct written in a language that I comprehend. I understand that if I have any questions about this Code of Conduct, I can contact [enter name of Contractor's contact person with relevant experience] requesting an explanation.

Name of Contractor's Personnel: [insert name]
Signature:
Date: (day month year):
Counter signature of authorized representative of the Contractor:
Signature:
Date: (day month year):

ATTACHMENT 1: Behaviors constituting Sexual Exploitation and Abuse (SEA) and behaviors constituting Sexual Harassment (SH)

ATTACHMENT 1 TO THE CODE OF CONDUCT FORM

BEHAVIORS CONSTITUTING SEXUAL EXPLOITATION AND ABUSE (SEA) AND BEHAVIORS CONSTITUTING SEXUAL HARASSMENT (SH)

The following non-exhaustive list is intended to illustrate types of prohibited behaviors:

1) Examples of sexual exploitation and abuse include, but are not limited to:

- A Contractor"s Personnel tells a member of the community that he/she can get them jobs related to the work site (e.g. cooking and cleaning) in exchange for sex.
- A Contractor's Personnel that is connecting electricity input to households says that he can connect women headed households to the grid in exchange for sex.
- A Contractor's Personnel rapes, or otherwise sexually assaults a member of the community.
- A Contractor's Personnel denies a person access to the Site unless he/she performs a sexual favor.
- A Contractor's Personnel tells a person applying for employment under the Contract that he/she will only hire him/her if he/she has sex with him/her.

2) Examples of sexual harassment in a work context

- Contractor's Personnel comment on the appearance of another Contractor's Personnel (either positive or negative) and sexual desirability.
- When a Contractor's Personnel complains about comments made by another Contractor 's Personnel on his/her appearance, the other Contractor's Personnel comment that he/she is "asking for it" because of how he/she dresses.
- Unwelcome touching of a Contractor's or Employer's Personnel by another Contractor"s Personnel.
- A Contractor's Personnel tells another Contractor's Personnel that he/she will get him/her a salary raise, or promotion if he/she sends him/her naked photographs of himself/herself.

(INTEGRITY PACT) DECLARATION OF FEES, COMMISSION AND BROKERAGE ETC; PAYABLE BY CONTRACTORS.

(FOR CONTRACTS WORTH RS. 10.00 MILLION OR MORE)

(FOR CONTRACTS WORTH RS. 10.00	MILLION OR MORE)
Contract NoDated	
Contract Value: Contract Title:	
obtained or induced the procurement of any contractor obligation or benefit from Government of Sindh (GoS) agency thereof or any other entity owned or controlled by practice.	ct, right, interest, privilege or other) or any administrative subdivision or
Without limiting the generality of the foregoing, [name that it has fully declared the brokerage, commission, it not given or agreed to give and shall not give or agreed Pakistan either directly or indirectly through any natifiliate, agent, associate, broker, consultant, directly subsidiary, any commission, gratification, bribe, finder consultation fee or otherwise, with the object of obtain contract, right, interest, privilege or other obligation or Procuring Agency (PA) except that which has been expense.	fees etc. paid or payable to anyone and ee to give to anyone within or outside tural or juridical person, including its or, promoter, shareholder, sponsor or 's fee or kickback, whether described as ning or inducing the procurement of a benefit in whatsoever form from, from
[name of Contractor] accepts full responsibility and s make full disclosure of all agreements and arrangements to the transaction with PA and has not taken any action the above declaration, representation or warranty.	s with all persons in respect of or related
[name of Contractor] accepts full responsibility and declaration, not making full disclosure, misrepresenting defeat the purpose of this declaration, representation are right, interest, privilege or other obligation or benefit without prejudice to any other rights and remedies available at the option of PA.	ng facts or taking any action likely to nd warranty. It agrees that any contract, obtained or procured as aforesaid shall,
Notwithstanding any rights and remedies exercise Supplier/Contractor/Consultant] agrees to indemnify Pa on account of its corrupt business practices and further equivalent to ten time the sum of any commission, grat given by [name of Contractor] as aforesaid for the procurement of any contract, right, interest, privile whatsoever form from PA.	A for any loss or damage incurred by it pay compensation to PA in an amount ification, bribe, finder s fee or kickback purpose of obtaining or inducing the
[Procuring Agency]	[Contractor]

FORMS OF TECHNICAL QUALIFICATIONS

Form 1: Bidder Information Form

Company ProfileAll individual firms and each partner of a joint venture submitting bid are requested to complete the information in this form.

1.	Name of firm (legal):		
	(In case of Joint Venture (JV), legal nar	me of each member	
2.	Nature of Business:		
	(W) ther the firm is a Corporation, Par	tnership, Trust etc.)	
	(Incase of Consortium; whether the Le Partnership, Trust etc.)	ad Consortium Member is a Corporation,	
3.	Head Office address:		
4.	Telephone:		
	Fax Number:		
	E-mail address:		
5.	Place of Incorporation/Registration:		
	Year of Incorporation/Registration:		
6.	Applicant"s authorized representative:		
	Telephone		
	Fax numbers:		
	E-mail address:		
7.	NATIONALITY OF OWNERS		
	Name:	Country:	

Form 2: Not Declared Ineligible by any Client/Entity

	Ineligibility							
	☐ Bidder shall not be declared ineligible by any Client/Entity							
Fo	rm 3: No (Conflict of Inte	erest					
	Conflict	of Interest						
	□ F	Bidder shall no	t have conflict of interest					
			Non-Performance f a JV must fill in this form					
Ľu -								
	Non-Perf	orming Contrac	ets					
	de (A	eadline for bid Affidavit to be	erformance did not occur within the last t submission based on all information on fully provided) erformance during the stipulated period,					
	Year	Outcome as Percent of Total Assets	Contract Identification	Total Contract Amount (current value, PKR)				
			Contract Identification:					
			Name of Employer:					
	Address of Employer:							
_			Matter in dispute:					
ſ								

Form 5: Bid Security Declaration

ity Declaration
dder shall not be under execution of a Bid–Securing Declaration
ry of Court/Arbitral Award
Court/Arbitral Award
dder shall not have the consistent history of court/arbitral award decision ain bidder
ry of Suspension /Termination ny civil work contracts that have been suspended or terminated and/or nace security called by an employer for breach of environmental or social g Sexual Exploitation and Abuse) contractual obligations
evious Contracts of the Bidder shall not be suspended or terminated and/or rformance security called by an employer for breach of environmental or social cluding Sexual Exploitation and Abuse)
listing
ng
idder shall not be black listed by government / semi government / autonomous / rivate organizations

Form 9: Pending Litigation

Pending Litigation				
 No pending litigation (A fully settled dispute or litigation is one that has been resolved in accordance with the Dispute Resolution Mechanism under the respective contract and where all appeal instances available to the Bidder have been exhausted) (Affidavit to be provided) □ Pending litigation (All pending litigation shall in total not represent more than 50% of the Bidder"s net worth and shall be treated as resolved against the Bidder) 				
Year	Outcome as Percent of Total Assets	Outcome as Percent of Total Assets	Total Contract Amount (PKR)	
		Contract Identification: Name of Employer: Address of Employer: Matter in dispute:		

Each Bidder or member of a JV must fill in this form

Financial Data for Previous 3 Years

Information from Balance Sheet

	Year 2021-22	Year 2020-21	Year 2019-20
Total Assets			
Total Liabilities			
Current Assets			
Current Liabilities			

Information from Income Statement

Total Revenues of Construction		
Profits Before Taxes		
Profits After Taxes		

- Attached are copies of financial statements (balance sheets including all related notes, and income statements) for the last three years, as indicated above, complying with the following conditions.
 - All such documents reflect the financial situation of the Bidder or partner to a JV, and not sister or parent companies.
 - Historic financial statements must be audited by a certified accountant.
 - Historic financial statements must be complete, including all notes to the financial statements.
 - Historic financial statements must correspond to accounting periods already completed and audited (no statements for partial periods shall be requested or accepted).
 - NTN certificate must be attached
 - Foreign firms if participating in the bidding process should submit NTN Certificate of their country duly attested by Consulate of their county

Form 11: Average Annual Construction Turnover

Each Bidder or member of a JV must fill in this form

Annual Turnover Data for the Last 3 Years (Construction only)				
Year	Amount (PKR)			
2021-22				
2020-21				
2019-20				
Average Annual Construction Turnover				

The information supplied should be the Annual Turnover (Construction only) of the Bidder or each member of a JV in terms of the amounts billed to clients for each year for work in progress or completed,

Form 12: 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 indicated in Prequalification Document

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

Form 13: Current Contract Commitments / Works in Progress

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

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

Form 14:Details of Contracts of Similar Nature and Complexity completed over the last 05 years

Sr. No.	1	2	3	4	5
Name of Contractor:					
Country:					
Name of Procuring Agency With Address, Tele, Fax.					
Nature of works and special features relevant to the contract for which applied:					
Contract Role (Mention: Sole, Sub Contactor or Partner in a Joint Venture).					
Value of the total contract in Pak/Rs:					
Date of Award:					
Date of Completion:					
Cost per day Index:					

Form 15: Personnel Capabilities

Bidder should provide the names of suitably qualified personnel to meet the specified requirements stated in Evaluation and Qualification Criteria

Sr. No.	Title of Position	Name
1		
2		
3		
4		
5		

Form 16: Curriculum Vitae (CV) for Proposed Experts

1. Propos	sed Position	n:	
2. Name	of Expert:		
3. Name	of Firm:		
4. Currer	address:No:		
E-	Mail Addr	ress:	No:
5. Date of	f Birth:	Citizenship:	
6. Qualif	ication:		
		e: Summarize professional experience in rever chnical and managerial experience relevant to the	
From To Company/Project/Position/Relevant technical and mana experience			

Form 17: Plant & Equipment

Bidder shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key equipment whether owned/ leased/ rented listed Evaluation and Qualification Criteria.

A. Equipment Capabilities (owned by the contractor/firm)

Sr. No	Name of Equipment	Name of Manufacturer	Model and power rating	Capacity	Year of Manufacture	Current Location
1						
2						
3						
4						
5						
6						
7						
8						

Note: Provide copies of ownership of equipment.

B. Equipment Capabilities (leased/rented by the contractor/firm)

Sr. No	Name of Equipment	Mention whether leased or rented	Name of Owner	Address of owner	Contact name and title with Telephone Fax &	Agreements Details of rental/ lease/ manufacture agreements
					Email of the owner	specific to the project
1						
2						
3						
4						
5						
6						
7						
8						

Note: Provide copies of Lease Agreement/Rent Agreement

FORMS

BID SECURITY PERFORMANCE SECURITY CONTRACT AGREEMENT MOBILIZATION ADVANCE GUARANTEE

BID SECURITY

(Bank Guarantee)

Security Executed on
(Date)
Name of Surety (Bank) with Address:
(Scheduled Bank in Pakistan)
Name of Principal (Bidder) with Address
Penal Sum of Security Rupees(Rs)
Bid Reference No.
KNOW ALL MEN BY THESE PRESENTS, that in pursuance of the terms of the bid and at the request of the said Principal (Bidder) we, the Surety above named, are held and firmly bound unto (hereinafter called the 'Procuring Agency') in the sum stated above for the payment of which
sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.
THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the Bidder has submitted the accompanying bid datedfor Bid Nofor(Particulars of Bid) to the said Procuring Agency; and
WHEREAS, the Procuring Agency has required as a condition for considering said bid that the bidder furnishes a bid security in the above said sum from a Scheduled Bank in Pakistan or

WHEREAS, the Procuring Agency has required as a condition for considering said bid that the **bidder** furnishes a bid security in the above said sum from a Scheduled Bank in Pakistan or from a foreign bank duly counter-guaranteed by a Scheduled Bank in Pakistan, to the procuring agency, conditioned as under:

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

NOW THEREFORE, if the successful bidder shall, within the period specified therefore, on the prescribed form presented to him for signature enter into a formal Contract with the said procuring agency in accordance with his bid as accepted and furnish within twenty eight (28) days of his being requested to do so, a Performance Security with good and sufficient surety, as may be required, upon the form prescribed by the said procuring agency for the faithful performance and proper fulfilment of the said Contract or in the event of non-withdrawal of the said bid within the time specified for its validity then this obligation shall be void and of no effect, but otherwise to remain in full force and effect.

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

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

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

SURETY (Bank)

WITNESS:	Signature
1	Name
	Title
Corporate Secretary (Seal)	Corporate Secretary (Seal)
2	
Name, Title & Address	

FORM OF PERFORMANCE SECURITY

(Bank Guarantee)

	Guarantee No
	Executed on Expiry date
[Letter by the Guarantor to the Procuring A	gency]
Name of Guarantor (Bank) with address:	
(Scheduled Bank in Pakistan) Name of Principal (Contractor) with address	s:
Penal Sum of Security (express in words an	d figures)
Letter of Acceptance No.	Dated
documents and above said Letter of Accept request of the said Principal we, the Guarar the	TS, that in pursuance of the terms of the bidding tance (hereinafter called the Documents) and at the ntor above named, are held and firmly bound unto
procuring agency) in the penal sum of the a	amount stated above for the payment of which sum ing agency, we bind ourselves, our heirs, executors,
THE CONDITION OF THIS OBLIGAT accepted the procuring agency's above said	TION IS SUCH, that whereas the Principal has Letter of Acceptance for
(Na	Name of Contract) for theme of Project).
the undertakings, covenants, terms and conterms of the said Documents and any externagency, with or without notice to the Guara well and truly perform and fulfill all the uncontract and of any and all modifications of of which modifications to the Guarantor be	ntractor) shall well and truly perform and fulfill all nditions of the said Documents during the original asions thereof that may be granted by the procuring antor, which notice is, hereby, waived and shall also ndertakings, covenants terms and conditions of the f said Documents that may hereafter be made, notice being hereby waived, then, this obligation to be void; till all requirements of Clause 11, Defects Liability,
of any liability attaching to us under this G	imited to the sum stated above and it is a condition fuarantee that the claim for payment in writing shall riod of this Guarantee, failing which we shall be a Guarantee.
procuring agency without delay upon the proor arguments and without requiring the p	(the Guarantor), waiving all objections and evocably and independently guarantee to pay to the rocuring agency's first written demand without cavil procuring agency to prove or to show grounds or p to the amount stated above, against the procuring

agency'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 Procuring Agency's designated Bank & Account Number.

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

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

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

FORM OF CONTRACT AGREEMENT

THIS CONTRACT AGREEMENT (hereinafter called the "Agreement") made on the

		-
	day of	(month), 20between
_	cy") of the one part and _Contractor") of the other part.	(hereafter called the "Procuring (hereafter called
be ex	REAS the Procuring Agency is desirous that c ecuted by the Contractor and has accepted a letion of such works and the remedying of an	bid by the Contractor for the execution and
NOW	this Agreement witnesseth as follows:	
1.	In this Agreement words and expression respectively assigned to them in the Condition	ns shall have the same meanings as are ions of Contract hereinafter referred to.
2.	-	ating addenda, if any, except those parts leemed to form and be read and construed as
	 (a) The Contract Agreement; (b) The Letter of Acceptance; (c) The Completed Form of Bid; (d) Special Stipulations (Appendix-A to Expecial Conditions of Contract (Fig. 1) (e) The Special Conditions – Part I; (g) The Completed Appendices to Bid (Fig. 2) (h) The Drawings; (i) Special provisions (j) General Specifications (k) The priced Bill of Quantities (Appendix 1) (l)	– Part II; B, C and E to O);
3.	as hereinafter mentioned, the Contractor h	de by the procuring agency to the Contractor nereby covenants with the procuring agency nedy defects therein in conformity and in all
4.	Procuring agency hereby covenants to p	pay the contractor, in consideration of the

execution and completion of the works as per provisions of the contract, the contract Price or such other sum as may become payable under the provisions of the contract at

the times and in the manner prescribed by the contract.

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

Signature of the Contactor	Signature of Procuring Agency
(Seal)	(Seal)
Signed, Sealed and Delivered in the presence of	f:
Witness:	Witness:
(Name, Title and Address)	(Name, Title and Address)

MOBILIZATION ADVANCE GUARANTEE

Bank Guarantee No	Date
WHEREASContract	(hereinafter called the 'Procuring Agency') has entered into a for(Particulars of Contract)
with	_(hereinafter called the "Contractor").
	Procuring Agency has agreed to advance to the Contractor, at the amount of Rupees (Rs) vanced to the Contractor as per provisions of the Contract.
	Procuring Agency has asked the Contractor to furnish Guarantee to dvance for the performance of his obligations under the said Contract.
AND WHEREAS,	
	etan) duarantor") at the request of the Contractor and in consideration of the regular to make the above advance to the Contractor, has agreed to furnish
advance for the purpose fulfillment of any of his	ne Guarantor hereby guarantees that the Contractor shall use the of above mentioned Contract and if he fails and commits default in obligations for which the advance payment is made, the Guarantor uring agency for payment not exceeding the aforementioned amount.
on the part of the Contra such first written demand	default, of which the procuring agency shall be the sole and final judge, ector, shall be given by the procuring agency to the Guarantor, and on I, payment shall be made by the Guarantor of all sums then due under by reference to the Contractor and without any objection.
	ain in force until the advance is fully adjusted against payments from nent Certificates of the Contractor or until whichever is earlier.
(Date) The Guarantor's liability	under this Guarantee shall not in any case exceed the sum of Rupees (Rs

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

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

INDENTURE FOR SECURED ADVANCES

•	e in cases in whi agreement for the							
expression executor (hereing WHER	DENTURE made	BETV the context s and assigns overnment" c ement, dated	VEEN (here so admits or) of the one of the other part (hereinafter	inafter impli- part a art). called	r called ed be de and THE the said	"the eemed to GOVE	o include lands of incl	nis heirs, SINDH ontractor
		(Here enter	(the descripti	on of	the work	s).		
	WHEREAS		contractor		has	applied	l to	the
		for an	advance	to	him	of	Rupees	
him to to of such work (i. Government) on the II of Ruston Contained advanced	on the she site of the said of the said work inclusive of the coment has agreed to security of mater anning Account Burning Ac	I works the sas as he has ost of materia o advance to rials the quantill (B), the same and ernment has	ubject of the undertaken als and labouthe Contracted titles and other aid works significant. Fin R.Form.	said a to exer r and or the er pare ned by 17.A	ngreemen ocute at rother char sum of R ticulars of the control	t for use rates fix arge) Al aupees, (af which tractor	e in the conted for the ND WHER Rs are detailed as as are hearking any	struction finished EAS the control finished EAS the fin Part finished finis
conside (Rs by the such fu are here	ration of the sum of t	of Rupees) on or befor receipt whe f any) as may y referred to	re the execution reof the Con y be made to as the said a	on of tractor him moun	these pre doth he as aforest) the Co	sents pa ereby ac said (all ontractor	id to the C cknowledge of which doth herel	ontractor e) and of advances
And dot	th hereby covenan	nt and agree v	vith the Gove	rnmen	it and dec	lare ay	follow :-	
` '	That the said RS. and all or any f be employed by works and for no) so adva further sum o	or sums which etor in or tow	Gover h may ards o	nment to	the Covanced	ntractor as as aforesa	aforesaid aid shall

That the materials detailed in the said Running Account Bill (B) which have been

offered to and accepted by (he Government as security for the said amount are

(2)

absolutely by the Contractors own property free from encumbrances of any kind and the Contractor will not make any application for or receive a further advance on the security of materials which are not absolutely his own property and free from encumbrances of any kind and the contractor hereby agrees, at all times, to indemnify and save harmless the Government against all claims whatsoever to any materials in respect of which an advance has been made to him as aforesaid.

- (3) That the said materials detailed in the said Running Account Bill (B) and all other materials on the security of which any further advance or advances may hereafter be made as aforesaid (hereinafter called the said materials) shall be used by the Contractor solely in the execution of the said works in accordance with the directions of the Divisional Officer (hereinafter called the Divisional Officer) and in the terms of the said agreement.
- (4) That the Contractor shall make at his own cost all necessary and adequate arrangement for the proper watch, safe custody and protection against all risks of the said material and that until used in construction as aforesaid the said materials shall remain at the site of the said works in the Contractor's custody and at his own risk and on his own responsibility and shall at all times be open to inspection by (he Divisional Officer or any officer authorized by him. In the event of the said materials of any part (hereof being stolen, destroyed or damaged or becoming deteriorated in a greater degree than is due to reasonable use and wear thereof Contractor will forthwith replace the same with other materials of like qualify or repair and make good the same as required by the Divisional Officer and the materials so brought to replace the said materials so repaired and made good shall also be considered as security for the said amount.
- (5) 'Hurt the said materials shall not on any account be removed from the site of the said works except with the written permission of the Divisional Officer or an officer authorized by him in that behalf
- (6) That the said amount shall be payable in full when or before the Contractor receives payment, from the Government of the price payable to him for the said works under the terms and provisions of the said agreement PROVIDED THAT if any intermediate payments are made to the contractor on account of work done then on the occasion of each such payment the Government will be at liberty to make a recovery from the Contractors Bill for such payment by deducting there from in the value of the said materials (hen actually used in the construction and in respect of which recovery has not been made previously the value for this purpose being determined in respect of each description of material at (he rates at which the amount of the advances made under these presents were calculated.

- (7) at if the Contractor shall at any time make any default in the performance or observation in any respect of any of the terms and provisions of the said agreement or of these presents the total amount of the advance or advances that may still be owing to the Government shall immediately on the happening of such default be repayable by the Contractor to the Government together with interest thereon at twelve percent per annum from the date or respective dates of such advance or advances to the date or repayment and with all costs, charges, damages and expenses incurred by the Government in or for the recovery thereof or the enforcement of this security or otherwise by reason of (he default of the Contractor and any moneys so becoming due and payable shall constitute a debt due from the Contractor to the Government and the Contractor hereby covenants and agrees with the Government to repay and the same respectively to it accordingly.
- (8) That the Contractor hereby charges all the said materials with the repayment to the Government of the said sum of Rupees (Rs.....) and any further sum or sums which may be advanced as aforesaid and all costs charges damages and expenses payable under these present PROVIDED ALWAYS and it is hereby agreed and declared that not, withstanding anything in the said agreement and without prejudice to the powers contained therein if and whether the covenant for payment and repayment hereinbefore contained shall become enforceable and the money owing shall not be paid to accordingly.

Once there with the Government may at any time thereafter adopt all or any of following courses as it may deem best;-

- (a) Seize and utilize the said materials or any part thereof in the completion of the said works on behalf of the Contractor in accordance with the provisions in that behalf contained in the said agreement debiting the Contractor with the actual cost of effecting such completion the amount due in respect of advances under these presents and crediting the Contractor with the value of work done as he had carried it out in accordance with the said agreement and at the rates thereby provided. If the balance is against the Contractor he is to pay the same to the Government on demand.
- (b) Remove and sell by public auction the seized materials or any part thereof and out of the moneys arising from the sale retain all the sums aforesaid repayable to the Government under these presents and pay over the surplus (if any) to the Contractor.
- (c) Deduct all or any part of the moneys owing out of the security deposit or any sum due to the Contractor under the said agreement.
- (9) That except as is expressly provided by the presents interest on the said advance shall not be payable.

(10) That in the event of any conflict between the provisions of these presents and the said agreement the provisions of these presents shall prevail and in the event of any dispute or difference arising over the construction or effect of these presents the settlement of which has not been hereinbefore expressly provided for the same shall be referred to the Superintending Engineer/Executive District Officer/Officer one grade higher to officer signed the agreement Circle whose............. decision shall be final and the provisions of the Arbitration Act 1940 for the time being in force so far as they are applicable shall apply to any such reference.

Singed, sealed and delivered by* In the presence of

SEAL

1st witness

SEAL

1st witness

2nd witness 2 witness

Condition of Contract

Federation International des Ingenieurs-Conseils, or FIDIC)

- (a) Part I General Condition of Contract
- (b) Part I Special Condition of Contract

Notes on the Conditions of Contract

The Conditions of Contract comprise two parts:

(a) Part I - General Conditions of Contract

(b) Part II - Special Conditions of Contract

Over the years, a number of "model" General Conditions of Contract have evolved. The one used in these Standard Bidding Documents was prepared by the International Federation of Consulting Engineers (Federation International des Ingenieurs-Conseils, or FIDIC), and is commonly known as the FIDIC Conditions of Contract. (The used version is the harmonized Edition March 2006).

The FIDIC Conditions of Contract have been prepared for an ad measurement (unit price or unit rate) type of contract, and cannot be used without major modifications for other types of contract, such as lump sum, turnkey, or target cost contracts.

The standard text of the General Conditions of Contract chosen must be retained intact to facilitate its reading and interpretation by bidders and its review by the procuring agency. Any amendments and additions to the General Conditions, specific to the contract in hand, should be introduced in the Particular Conditions of Contract.

The use of standard conditions of contract for all civil works will ensure comprehensiveness of coverage, better balance of rights or obligations between procuring agency and Contractor, general acceptability of its provisions, and savings in time and cost for bid preparation and review, leading to more economic prices.

The FIDIC Conditions of Contract are copyrighted and may not be copied, faxed, or reproduced. Without taking any responsibility of its being accurate, Pakistan Engineering Council with prior consent of FIDIC Secretariat, has reproduced herein the FIDIC General Conditions of Contract for reference purpose only which cannot be used by the users for preparing their bidding documents. The bidding document may include a purchased copy, the cost of which can be retrieved as part of the selling price of the bidding document. Alternatively, the FIDIC Conditions of Contract can be referred to in the bidding documents, and the bidders are advised to obtain copies directly from FIDIC

Copies of the FIDIC Conditions of Contract can be obtained from:

FIDIC CASE POSTALE, CH-1215 Switzerland;

Tel. +41 22 799 49 00;

Fax; +41 22 799 49 01 E-mail: fidic@fidic.org.

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PART B - SPECIAL / PARTICULAR CONDITIONS OF CONTRACT

1.1	Definitions
1.1.1.4	"Form of Bid" is synonymous with "Letter of Tender".
1.1.1.5	"Bid" is synonymous with "Tender".
1.1.1.8	"The word "Tender" is synonymous with "Bid", and the words "Bidding" with "Tendering" and the words "Appendix to Tender" with "Appendix to Bid" and words "Tender Documents" with "Bid Documents".
1.1.1.11	Insert this Sub Clause
	"Programme" means the programme to be submitted by the contractor in accordance with Sub-Clause 8.3 and any approved revisions thereto.
1.1.2.2	"Employer" is synonymous with "Procuring Agency" The Employer is:
	Office of Superintending, KDA Room No.406, 4th Floor Civic Centre, Gulshan-e-Iqbal Karachi.
1.1.2.4	The Engineer is: To be notified
1.1.2.9	"DB" is synonymous with "Committee"
1.1.2.11	"Bank" means the Schedule Bank of Pakistan
1.1.2.12	Borrower
1.1.3.1	"Replace 28 days with 7 days"
1.1.3.7	"Defects Notification Period is synonymous with Defects Liability Period"
	Add following definitions
1.1.6.10	"ES" means Environmental and Social (including Sexual Exploitation and Abuse (SEA) and Sexual Harassment (SH)
1.1.6.11	"Sexual Exploitation and Abuse" "(SEA)" means the following:
	"Sexual Exploitation" is defined as any actual or attempted abuse of position, including, but not limited to, profiting monetarily, socially or politically from the sexual exploitation of another;

	"Sexual Abuse" is defined as the actual or threatened physical intrusion of a sexual nature, whether by force or under unequal or
	coercive conditions
1.1.6.12	"Sexual Harassment" "(SH)" is defined as unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature by the Contractor"s Personnel with other Contractor"s or Employer"s Personnel
Sub-Clause 1.5	Replace sequence of priority of documents with the following:
Sub-Clause 1.6 Contract Agreement	 (a) the Contract Agreement (if completed), (b) the Letter of Acceptance, (c) the Completed Letter of Bid (d) the Particular Conditions – Part A, (Appendix A) (e) the Particular Conditions – Part B (f) the General Conditions (g) the completed Appendices to Bid (E to O) (h) the Drawings, (i) Special Provisions (j) Specification, (k) the Appendix D, Bill of Quantities and (l) the Schedules and any other documents forming part of the Contract. Replace the word "Employer" with "Contractor" in last line
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Sub-Clause 2.4 Employer's Financial Arrangements	This Sub-Clause is deleted entirely.
Sub-Clause 3.1	The following paragraph is added after duties:
Engineer's Duties and Authority	Procuring agency shall ensure that the Engineer"s Representative/Staff is a professional engineer as defined in the Pakistan Engineering Council Act 1975 (V of 1976)
	Replace part of Clause after the sentence "The following provisions shall apply" with following:
	The Engineer shall obtain the specific approval of the Employer before taking action under the following Sub Clauses of these conditions:
	a) Sub-Clauses 1.9, 2.1, 4.7, 4.12, 4.24, 7.4, 8.4, 8.5, 8.9, 10.3, 13.7, and 19.4: Agreeing or determining an extension of time and / or additional cost.
	b) Approving subletting of any part of the Works under Clause 4.4.
	c) Sub-Clause 8.8: Instructing suspension of Works;
	d) Sub-Clause 10.1: Issuing Taking Over Certificate
	e) Sub-Clause 10.2: Issuing Taking Over Certificates

f) Sub-Clause 11.9: Issuing Performance Certificate(s) g) Sub Clause 13.1: Instructing a Variation, except; i. in an emergency situation as determined by the Engineer, or ii. if such Variation would increase the Accepted Contract Amount not more than 1% cumulatively of such Amount. h) Sub-Clause 13.3: Approving a proposal for Variation submitted by the Contractor in accordance with Sub Clause 13.1 or 13.2. i) Sub Clause 13.4: Specifying the amount payable in each of the applicable currencies j) Sub-Clause 13.7: Before Adjustment for Changes in Legislation k) Sub-Clause 13.8: Before Adjustment for Changes in Cost 1) Sub-Clause 20.1: Approving Claims of the Contractor (Time / Financial) under Clause 20.1 and accepting principles of the Claims h) 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 Works or 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. **Sub-Clause 3.6** Insert this Sub Clause at the end of Clause 3 **Management Meetings** "The Engineer or the Contractor"s Representative may require the other to attend a management meeting in order to review the progress with reference to the agreed program and arrangements for future works. The Engineer shall record the business of management meetings and supply copies of the record to those attending the meeting and to the Employer. In the record, responsibilities for any actions to be taken shall be in accordance with the Contract". Add following at the end of Sub-Clause 4.1: Sub-Clause 4.1. Contractor's General The Contractor shall prepare and submit one complete set of "As-**Obligation** Built" Documents on one master CD and two complete sets of print copies of "As-Built" Documents together with the back-up of the quantity calculation to the Engineer within 28 days after the date of taking over by Employer. These "As-Built" Documents shall indicate all approved changes made during construction, superimposed on the original plans / "As-Staked Documents". The final measured quantities for all pay items shall be included on

all "As-Built" Documents. These "As-Built" Documents shall be prepared continuously as execution of the Works progresses and shall be submitted to the Engineer for review as sections or parts of the Project are completed. No Taking-Over Certificate for a Sector or the whole of Works shall be issued to the Contractor by the Engineer without the approved "As-Built" Documents. The preparation of the "As-Built" Documents shall be at the expense of the Contractor, payment for which is subsidiary to the pay items of the Contract.

The review and approval by the Engineer or by the Employer of the "As-Built" Documents does not relieved the Contractor of any responsibility for and/or liabilities arising out of inaccurate, false or otherwise incorrect "As-Built" Documents prepared and submitted by the Contractor. The approved "As-Built Documents" shall be reproduced by the Contractor in four (4) hard copies and one (1) soft copies and return the same to the Employer.

Shop Drawings. The Contractor shall furnish to the Engineer all Contractor's, and Subcontractor's Shop Drawings. Shop Drawings shall be deemed to include design drawings, fabrication drawings, catalogue cuts, brochures, illustrations, material lists, design calculations, reference standards and performance data which may be required by the specification necessary for the proper execution of the Work, or as otherwise required by the Engineer for assurance that there is intent to meet the requirements of the specifications. All Shop Drawings shall be in English.

The Contractor shall submit all Shop Drawings to the Engineer in the manner hereinafter described, in sufficient time to prevent delays in the delivery of materials or in the progress or completion of the work. Regardless of the source of Shop Drawings, all submissions shall be deemed to be submissions by the Contractor under the Contract.

All Subcontractors' Shop Drawings shall first be sent directly to the Contractor. The Contractor shall thoroughly check all such Shop Drawings for measurements, sizes of members, materials and all other details, to assure him that the Shop Drawings conform to the intent of the Drawings and Specifications.

The Contractor shall return to the Subcontractors for correction, such Shop Drawings that are found inaccurate or otherwise in error. After the Contractor has checked and approved such Shop Drawings he shall place thereon the date of such approval and the legible signature of the checker, and shall then submit them to the Engineer for review. The Engineer may refuse to check or review any Shop Drawings that are not submitted in compliance with the foregoing requirements.

The Contractor shall submit five (5) copies of Shop Drawings plus the number that the Contractor wishes to return for his own and his Subcontractor's use.

For all Equipment, Shop Drawings shall be completed in all

respects and shall show clear compliance with the Specifications. Where applicable, performance figures of equipment, finishes and reference to other relevant drawings must be noted on the Shop Drawings. Details of ancillary items being supplied with the particular equipment must be submitted. Piecemeal submissions will not be considered.

Descriptive brochures that are applicable shall be included for information. Any notation on the Shop Drawings which is on the prints and not on the original from which the prints were made shall be in GREEN INK.

The Engineer will review submitted Shop Drawings within a reasonable time and will return them stamped with "NO COMMENT", "SEE COMMENTS" or "RESUBMIT".

The Engineer may, at his discretion, require an immediate resubmission of Shop Drawings noted "SEE COMMENTS" so that he can make a further review or amendments. Drawings requiring re-submission shall be either amended and re-submitted or shall be superseded by another Shop Drawings. Comments on Shop Drawings are not orders for Extra Work.

Shop Drawings re-submitted for further review will be reviewed for response to previous notations only and the Contractor, by such re-submission shall be held to have represented that such Shop Drawings contain no other alterations, additions or deletions, unless the Contractor (in writing) directs the Engineer specific attention to the same.

Should the Contractor question, or dissent, from such notations or comments, he shall direct the Engineer's attention to the same for further clarification before re-submitting.

By reviewing Shop Drawings, the Engineer does not assume responsibility for errors or omissions and non-compliance with the Contract requirements. Such errors and omissions must be made good by the Contractor, irrespective, of the receipt, checking, or review of the Shop Drawings by the Engineer and even though the Work is done in accordance with such Shop Drawings.

Quality of Plans ("As-Built", "As Staked" and other Drawings for Variation). All sheets of the "As-Built", "As-Staked" and other drawings for Variations should be of uniform size and one (1) standard size (A1) using Mylar or other quality tracing paper. The sheets must be neat and clean and without any crossed-out or voided portion. The title block should be made an integral part of the sheet plans and not merely patched-up.

Supplementary Drawings and Instructions. The Engineer shall have the authority to issue to the Contractor from time to time such supplementary drawings and instructions to the proper and adequate execution of the Works and the remedying of any defects therein. The Contractor shall carry out and be bound by the same.

The Contractor shall designate an additional set of drawings as

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	"Record Drawings" and keep them to the site.
	The Contractor shall clearly and neatly mark the Record Drawing in ink to indicate all authorized changes in the work, and also as actually constructed. These additional plans will not change the work of the Contract but will elucidate or explain it.
Sub-Clause 4.3	Insert additional paragraph at the end of Sub-Clause 4.3
Contractor's Representative	The Contractor's authorized representative and his other professional engineers working at site shall register themselves with the Pakistan Engineering Council.
Sub-Clause 4.4	Replace first line with the following
Subcontractors	The Contractor may subcontract the Works for the maximum value equal to 30% of the Accepted Contract Amount.
Sub-Clause 4.8	Insert additional paragraph at the end of Sub-Clause 4.8
Safety Procedures	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 make, maintain and submit reports to the Engineer concerning safety, health and welfare of persons and damage to property, as the Engineer may from time to time prescribe.
	The Contractor shall have on his staff at the site an officer dealing only with questions regarding the safety and protection against accidents of all staff and labour. This officer shall be qualified for this work and shall have the authority to issue instructions and shall take protective measures to prevent accidents. Adequate number of Site Safety Inspectors shall be deployed by Contractor to assist Accident Prevention Officer and ensure safety of workers in the hazardous work areas.
	The Contractor shall within 24 hours of the occurrence of any accident at or about the site or in connection with the execution of the Works report such accident to the Engineer with copy to the Employer. In case of any fatality or serious accident the Contractor shall in addition notify the Engineer immediately by the quickest available means.
	In case of fatal accident, the Engineer may suspend the Work till the Contractor enhances proper safety arrangements. Such suspension shall be at the Cost of the Contractor and no time extension shall be considered for such suspension.
	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.

Sub-Clause 4.18 Protection of the Environment

Final paragraph to be added to after second paragraph

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

Borrow areas shall be located and operated so as not to detract from the future usefulness or value of the sites. Upon completion of operations, borrow areas shall be left in a safe and sightly conditions. No borrow areas shall be located within 500 meter from the right of way.

During the performance of the work required under the Contract, the Contractor shall carryout proper and efficient measures as often as necessary to reduce the dust nuisance, and to prevent dust originating from his operations. For waste water disposal, the provision of septic tank alone for worker's camp etc. will not be sufficient and may have to be supplemented with secondary treatment in form of gravel drains / constructed wetland depending on the laboratory results of effluent from the septic tank.

The Contractor shall take all necessary measures to prevent water from the Site causing a nuisance on or, in any neighbouring land or property either by causing flooding or by depositing sediment on the surface of the ground or in drains or watercourses. Wherever necessary to prevent this, the Contractor shall construct temporary drainage channels, layer sumps and traps (in addition to those shown on the Contract) discharging into existing drain, ditches or watercourses. The Contractor snail removes over all sediment, which may accumulate on any land or in any drains, ditches or watercourses or in any other property as a result of his operations.

All works including those below sub-soil standing water level shall be carried out in the dry unless specified otherwise. The Contractor's arrangements for controlling the inflow of water into the parts of the excavation being worked and during the placing of concrete and other works therein and for the collection and disposal of water shall be to the Engineer's Approval. Such arrangements may include interalia temporary cofferdams, well-point systems, pumps; drains trenches, flumes and other recognized means. All

Costs and charges in dealing with water in any way whatsoever and the effects thereof will be deemed to be included in the Contract Price and in the unit rates or prices of the Contractor for excavations.

Water flowing into excavations shall be carried by trenches, drainage layers or open jointed drains to sumps from which it shall be pumped. Such trenches drains or sands shall generally be clear of the Permanent Works unless approved otherwise by the Engineer. If, with the said Approval of the Engineer trenches drains or sumps are excavated under or immediately adjacent the Permanent Works, these shall comprise open-jointed pipes with gravel mounds. When no longer required and when approved by the Engineer they shall be filled with a cement /sand grout injected under pressure so as to fill the pipe and all voids completely.

The Contractor shall keep all surfaces upon or against which concrete is to be deposited free from running water and no concrete shall be placed until such surfaces are properly drained. Suitable precautions shall be taken to prevent running water from washing out cement or concrete while it is setting or from injuring the Works in any other way.

Notwithstanding the Approval by the Engineer of the Contractor's methods of dealing with water, the Contractor shall be responsible for and accept all the risks and liabilities of dealing with water from whatever source and of all effects thereof.

The Contractor shall throughout the execution and completion of the Works and the remedying of any defects therein, comply with all applicable Environment Protection Laws and Regulations of the Country.

For other details regarding Environment, Health and Safety refer to Appendix L and M, SP-10 and SP-11, which are the integral part of the Contract Documents.

Sub-Clause 4.21 Progress Reports

Add following paragraphs after paragraph (h)

- (i) An updated construction schedule indicating the progress in percentage; and
- (j) Description of all works carried out since the last report; and
- (k) An updated Progress Curve/Projected Cash flow indicating the planned and actual progress; and
- (l) An updated Critical Resource Usage Chart showing comparison of planned and actual values; and
- (m) An updated material procurement plan showing comparison of planned and actual values; and
- (n) An updated schedule of shop drawings comparison of planned and actual values; and
- (o) Description of the Works planned for the next 28 days sufficiently detailed to enable the Engineer to determine his programme of inspection and testing; and

	 (p) Summary of all submission; and (q) Information about problems and areas of concern and proposal to overcome the same.
Sub-Clause 6.5 Working Hours	Add the following paragraph at the end of Sub-Clause 6.5: The Contractor shall pay overtime payment to the Engineer's Support Staff/Personnel who were required by the Contractor to perform their respective work assignment beyond the normal working hours stated in Part A – Particular Conditions (Appendix A).
Sub-Clause 6.10 Records of Contractor's Personnel and Equipment	The following paragraphs added: The Contractor shall, upon request by the Engineer at any time in relation to any time of hired Contractor's Equipment, forthwith notify the Engineer in writing the name and address of the Owner of the equipment and shall certify that the agreement for the hire thereof contains a provision in accordance with the requirements
Sub-Clause 6.20 Prohibition of Forced or Compulsory Labor	Delete Text of Sub-Clause 6.20 and replace with following: The Contractor, including its Subcontractors, shall not employ or engage forced labor. Forced labor 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 labor, such as indentured labor, bonded labor or similar labor-contracting arrangements. No persons shall be employed or engaged who have been subject
	to trafficking. Trafficking inn persons is defined as the recruitment, transportation, transfer, harboring or receipt of persons by means of the threat or use of force or other forms of coercion, abduction, fraud, deception, abuse or power, or of a position of vulnerability, or of the giving or receiving of payments or benefits to achieve the consent of a person having control over another person, for the purposes of exploitation
Sub-Clause 6.21 Prohibition of Harmful Child Labor	Delete Text of Sub-Clause 6.21 and replace with following: The Contractor, including its Subcontractors, shall not employ or engage a child under the age of 14 unless the national law specifies a higher age (the minimum age). The Contractor, including its Subcontractors, shall not employ or engage a child between the minimum age and the age of 18 in a manner that is likely to be hazardous, or to interfere with, the child"s educations, or to be harmful to the child"s health or physical, mental, spiritual, moral, or social development.

The Contractor including its Subcontractors, shall only employ or engage children between the minimum age and the age of 18 after an appropriate risk assessment has been conducted by the Contractor with the Project Manager's approval. The Contractor shall be subject to regular monitoring by the Project Manager that includes monitoring of health, working conditions and hours of work.

Work considered hazardous for children is work that, by its nature or the circumstances in which it is carried out, is likely to jeopardize the health, safety, or morals of children. Such work activities prohibited for children include work:

- (a) with exposure to physical, psychological or sexual abuse;
- (b) underground, underwater, working at heights or in confined spaces;
- (c) with dangerous machinery, equipment or tools, or involving handling or;
- (d) transport of heavy loads;
- (e) in unhealthy environments exposing children to hazardous substances, agents, or processes, or to temperatures, noise or vibration damaging to health; or
- (f) under difficult conditions such as work for long hours, during the night or in confinement on the premises of the employer.

Sub-Clause 6.23 Workers' Organizations

Insert sub-clauses after Sub-Clause 6.22:

In countries where the relevant labor laws recognize workers" rights to form and to join workers" organizations of their choosing and to bargain collectively without interference, the Contractor shall comply with such laws. In such circumstances, the role of legally established workers" organizations and legitimate workers" representatives will be respected, and they will be provided with information needed for meaningful negotiation in a timely manner. Where the relevant labor laws substantially restrict workers" organizations, the Contractor shall enable alternative means for the Contractor"s Personnel to express their grievances and protect their rights regarding working conditions and terms of employment. The Contractor shall not seek to influence or control these alternative means. The Contractor's shall not discriminate or retaliate against the Contractor's Personnel who participate, or seek to participate, in such organizations and collective bargaining or alternative mechanisms. Workers" organizations are expected to fairly represent the workers in the workforce.

Sub-Clause 6.24 Non-Discrimination and Equal Opportunity

Insert sub-clauses after Sub-Clause 6.23

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, people with disabilities, migrant workers and children (of working age in accordance with sub-Clause 6.24
Sub-Clause 6.25	Insert sub-clauses after Sub-Clause 6.24
Epidemics	In the event of any outbreak of illness of an epidemic nature, the Contractor shall comply with and carry out such regulations, orders and requirements as may be made by the Government or the local medical or sanitary authorities, for the purpose of dealing with and overcoming the same.
Sub-Clause 7.9	Insert additional sub-clauses after Sub-Clause 7.8
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
and Services	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.
Sub-Clause 8.1	Delete paragraph (b) entirely and substituted with the following.
Commencement of	
Works	The contractor shall commence the works on site within the period
	named in Appendix-A to Bid from the date of receipt by him from the Engineer of a written Notice to Commence. Thereafter, the
	contractor shall proceed with the works with due expedition and
	without delay.
Sub-Clause 8.3	Insert following additional paragraphs at the end of Sub Clause
Programme	8.3;
	The program shall be submitted within 07 days from the date of receipt of Notice to Commences. The Contractor shall incorporate and mention activities with allotted time and resources for activities of different stages. Also, the Programme of work should also clearly identify the activities with time and resources for parts of work as stated in Appendix A.
	The Contractor shall pay a penalty of Rs.200,000/- (Rupees T w o Hundred Thousand only) for each day of delay in the submission of said revised programme. The Employer shall recover such amount from any payment due to the Contractor under the

Contract, on the Engineer's recommendations.

a. The Contractor shall submit the Programme of Works on Primavera for the agreement of the Engineer and approval of the Employer: All items of works and activities including mobilization should be included in the Programme of Works. The programme shall identify and highlight those activities, which are on the Critical Path. This programme of works as scheduled shall form basis of Delay Damages pursuant to SubClauses 8.7 of the Condition of Contract.

In addition, cash flow estimates shall be supported with inputs of over drafts organized with financial institutions at various stages of the projects to meet the funding requirements of the project. The Contractor shall supply and maintain at his site office for his and Engineer"s use a licensed copy of the project management computer software package namely Primavera for programming and to monitor the progress. It shall be supplied complete with manuals and technical training and support for the duration of the Contract as per requirements assessed by the Engineer.

- b. In order to assist the Engineer, Contractor shall be required to submit at 2 weeks intervals data to the Engineer on the cost and quantities and other data relevant to the monitoring of progress according to a particular format suitable for computer processing.
- c. The programme should identify all items of work including temporary work. Progress reporting by the Contractor should be supported on a monthly basis with an up-to- date analysis of the progress including a statement on items, which are or are about to become critical to the progress of the work along with the proposals on how the Contractor intends to alleviate the situation
- d. The programme should be resource based and must provide the critical resources. The programme must be drawn up on CPM.

General Requirements:

- a. Programme should be submitted (both hard and soft copy strictly following the guidelines and format specified in this Clause.
- b. The Engineer at any time during the execution of the Works; direct the Contractor to change/modify the Programme / Schedule base on the Priority of Works.
- c. No payment shall be released to the Contractor prior to approval of the Base Line Programme by the Engineer.

- d. Submittal of Programe consists of:
 - a. Construction Schedule (CPM):
 - b. Progress Curve/Project Cash Flow;
 - c. Critical Resources Usage Chart;
 - d. Detailed Method Statement;
 - e. Material Procurement Plan:
 - f. Schedule of Submittals and Shop Drawings;
 - g. Any other details as required by the Engineer;

Construction Schedule: F

- a. Construction Schedule shall be developed on the basis of Work Breakdown Structure provided or approved by the Engineer.
- b. Construction Schedule shall be detailed up to level 4 or as required by the Engineer.
- c. Durations of construction activity should be calculated practically in relation to quantity of work done and allocated resources. Any activity that demands duration greater than seven (07) calendar days should be split into number of activities to monitor the same accordingly.
- d. Construction activities of the schedule should be logically linked with preceding and succeeding activities and showed in submitted construction schedule.
- e. Critical Activities and Critical Path of the project should be highlighted with red colour in bar chart and precedence diagram. Total Float for non-critical activities should also be shown in the schedule.
- f. Appropriate quantity of direct resources (material, labour, equipment and non-consumable material) should be allocated to all activities and showed in submitted construction schedule. Labour resource should be divided according to related trades (e.g. Mason, Operator, helper etc.) Contractor should make sure that no resource is being over allocated. Indirect resources should be allocated to supervision / summary activity.
- g. BOQ amount should be loaded to reach construction activity. Accrual basis should be indicated to construction activity.
- h. Construction Schedule should show Activity ID, Activity Description, BOQ Quantity, Duration, Start Date, Finish Date, Total Float, Predecessors, Resource names with quantity, BOQ Amount and timescale where the bars show start and finish dates.

Progress Curve / Projected Cash Flow:

- a. Progress Curve / Projected Cash Flow should be developed and presented on Project Management Software Primavera Project Planner.
- b. S-Curve should be plotted between time (in weeks) and

progress of work done (in % of work). The progress should be shown in cumulative percent of work done. Percent of work done should be calculated with the BOQ amount and payment terms.

Critical Resources Usage Chart:

- a. Critical Usage Chart should be developed.
- b. List of Critical Resources included Labourers, equipments, consumable/non-consumable materials and/or identified by the Engineer.
- c. Resource usage chart should show Resource Name and weekly utilization (numbers) of resources on each activity.

Detailed Method Statement:

Detailed method statement should be presented in descriptive format explaining the method of carrying out works, logistics site layout, flow of work, quality and safety measures for each activity and any other details as required by the Engineer.

Material Procurement Plan:

a. Material Procurement Plan for major items of purchase should be presented in a Tabular Format to be submitted to the Engineer for pre-approval. The Plan must as a minimum show the list of local & imported materials to be used, their specification reference, and planned dates for submittal to Consultant, approval process, placing of order, vendor contact, required delivery on site, status of Line of Credit (LOC) if applicable, and usage of material.

Schedule of Shop Drawings and Submittals:

Schedule of Shop Drawings and other Submittals should be presented in a Tabular Format to be submitted to the Engineer for pre-approval. Plan must as a minimum show the list of shop drawings required and their specification reference, planned dates for submittal to consultant, approval process, and usage of shop drawing.

Cash Flow Estimates:

The Contractor shall, within 28 days from the receipt of the Letter of Acceptance, provide to the Engineer for his information a detailed cash flow estimate in quarterly periods, of all payments to which the Contractor will be entitled under the Contract and the Contractor shall subsequently supply revised cash flow estimates at quarterly intervals, if required to do so by the Engineer.

Revised Programme of work:

If at any time it should appear to the Engineer that the actual progress of the Works does not conform to the programme to which consent has been given under Sub-Clause 8.3, the Contractor shall produce, at the request of the Engineer, a revised programme showing the modifications to such programme necessary to ensure

completion of the Works within the Time for Completion.

The revised programme, in accordance with the Contract, shall be submitted within fourteen (14) days of the request received from the Engineer. The Contractor shall pay a penalty of Rs.100,000/(Rupees Hundred Thousand only) for each day of delay in the submission of said revised programme. The Employer shall recover such amount from any payment due to the Contractor under the Contract, on the Engineer"s recommendations.

Notwithstanding General Conditions of the Contract Sub Clause 8.3, the program to be submitted for the execution of the works shall, in addition to the program of pure construction activities, include an alleviation program for site staff and labour and their families (if allowed to stay at camp) in respect of Sexually Transmitted Infections (STI), Sexually Transmitted Diseases (STD) including HIV/AIDS. The STID and HIV/AIDS alleviation program shall indicate when, how and at what cost the Contractor plans to satisfy the requirements of Sub Clause 6.7 herein and the related Appendices and Special Provisions.

Sub-Clause 8.7 Delay Damages

Insert following additional paragraphs at the end of Sub-Clause 8.7

Notwithstanding the provision of above stated conditions following shall prevail:

The rate of Delay Damages shall be 0.1% per day of the Contract Price for every day of delay in which whole or part of the work(s) remained unfurnished subject to a maximum of 10% of the Final Contract Price.

In addition to the Delay Damages, the Contractor shall borne all the cost/expenses related to the supervision of the works by the Engineer and his staff covering salaries of the Engineer and all of his Site Supervision staff including all the benefits, providing running and maintenance of all the Engineer"s Facilities up to the issuance of the Taking Over Certificate by the Employer. All the above cost/expanses will not be reimbursed / paid to the Contractor beyond the approved completion period of the works.

If, before the Time for Completion of the whole of the Works or, if applicable, any Section, a Taking-Over Certificate has been issued for any part of the Works or of a Section, the delay damages for delay in completion of the remainder of the Works or of that Section shall, for any period of delay after the date stated in such Taking-Over Certificate, and in the absence of alternative provisions in the Contract, be reduced in the proportion which the value of the part so certified bears to the value of the whole of the Works or Section, as applicable. The provisions of this Sub-Clause shall only apply to the rate of delay damages and shall not affect the limit thereof.

Sub-Clause 10.1 Taking Over of the

Insert following as 3rd paragraph after 2nd paragraph

Works and Sections	Within 07 days of the date of receipt of Contractor"s notice for issuance of Taking Over Certificate the Employer shall on the written request of the Engineer constitute a committee comprising of Engineer/Engineer"s Representative, Employer"s and Contractor"s Representatives. The Committee shall conduct a detailed inspection of the works completed by the Contractor to ascertain the completion or the extent of completion to decide about the issuance of Taking Over Certificate. The Engineer shall take further action on the Contractor"s application in pursuance to the recommendations of the committee.
Sub-Clause 11.9 Performance Certificate	At the completion of the Defects Notification Period the Employer shall constitute a committee comprising of Engineer / Engineer"s Representative, Employer"s and Contractor"s Representatives. The Committee shall conduct a detailed inspection of the works to ascertain the issuance of Performance Certificate or otherwise.
Sub-Clause 13.1 Right to Vary	In the last line of Para, after the word "Variation", the word "in writing" is added.
Sub-Clause 13.3 Variation Procedure	In the tenth line, after the words "as soon as practicable" following is added: "and within a period not exceeding one-eighth of the completion time"
Sub-Clause 14.1 The Contract Price	Renumber subparagraphs (c) and (d) as (f) and (g) and delete subparagraph (e).
	Insert following paragraphs (c), (d) and (e):
	(c) The Contract Price shall include all taxes, duties and other charges imposed outside the Country on the production, manufacture, sale and transport of the Contractor"s Equipment. Plant, Materials and supplies to be used on or furnished under the Contract, and on the services to be performed under the Contract.
	(d) The Contractor's staff and labour will be liable to pay personal income taxes in the Country in respect of such of their salaries and wages as are chargeable under the Laws for the time being in force, and the Contractor shall perform such duties in regard to such deductions thereof as may be imposed on him by such laws.
	(e) Notwithstanding the provisions of subparagraph (b), Contractor's Equipment, including essential spare parts therefore, 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 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 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 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 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 exported; and (b) on the initial imported value that 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.

Sub-Clause 14.2 Advance Payment

Delete the Clause in entirety and replace with following

The Employer if requested by the Contractor shall make an advance payment for mobilization and cash flow support, when the Contractor submits a guarantee in accordance with this Sub-Clause. The total advance payment, the number and timing of instalments (if more than one) shall be as stated in the Appendix A.

The Advance Payment (if required) shall be paid in two equal instalments after the following conditions have been fulfilled.

Installment-1: 50% of the total amount of the Advance Payment

- That the Contract Agreement has been signed by the Parties.
- The Contractor has submitted bank guarantee for the full amount of the advance payment in the form of irrevocable without recourse bank guarantee.
- The Contractor has submitted the Performance Security in the form as prescribed in Sub-Clause 4.2.

Installmentt-2: Remaining 50% of the total amount of the Advance Payment shall be paid on mobilization of Plant, Equipment and other resources at site by the Contractor to the satisfaction of the Engineer

Unless and until the Employer receives this guarantee, or if the total advance payment is not stated in the Appendix A, this Sub-Clause shall not apply.

The Engineer shall deliver to the Employer and to the Contractor an Interim Payment Certificate for the advance payment or its first instalment after receiving a Statement (under Sub-Clause 14.3 [Application for Interim Payment Certificates]) and after the

Employer receives (i) the Performance Security in accordance with Sub-Clause 4.2 [Performance Security] and (ii) a guarantee in amount equal to the advance payment. This guarantee shall be issued by an entity and from within a country (or other jurisdiction) approved by the Employer, and shall be in the form annexed to the Particular Conditions or in another form approved by the Employer.

The Contractor shall ensure that the guarantee is valid and enforceable until the advance payment has been repaid, but its amount shall be progressively reduced by the amount repaid by the Contractor as indicated in the Payment Certificates. If the terms of the guarantee specify its expiry date, and the advance payment has not been repaid by the date 28 days prior to the expiry date, the Contractor shall extend the validity of the guarantee until the advance payment has been repaid.

At any time, the bank guarantee shall be valid for an amount not less than the amount of the original Advance Payment less any partial repayment of that Advance Payment which may have been affected. The Contractor shall inform the guaranteeing bank, by letter, counter signed by the Employer, of the required amount of the guarantee from time to time. Reduction of the amount shall not be made without such authorizing letter.

Unless stated otherwise in the Appendix A, the advance payment including interest shall be recovered in 5 equal instalments starting from third running bills (IPCs) and in case the number of bills is less than 5 then 1/5 of the advance inclusive of the interest thereon shall be recovered from each bill and the balance together with interest be recovered from the final bill. It may be insured that there is sufficient amount in the final bill to enable recovery of the Mobilization Advance.

If the advance payment has not been repaid prior to the issue of the Taking-Over Certificate for the Works or prior to termination under Clause 15 [Termination by Employer], Clause 16 [Suspension and Termination by Contractor] or Clause 19 [Force Majeure] (as the case may be), the whole of the balance then outstanding shall immediately become due and in case of termination under Clause 15 [Termination by Employer] and Sub-Clause 19.6 [Optional Termination, Payment and Release], payable by the Contractor to the Employer.

In the event that the amount of money certified and due to the Contractor under the contract at any time is less than the total of due repayments of Advance Payment, the balance of the due repayments shall be paid to the Employer by the Contractor within seven days of demand by the Employer. If the balance is not so paid, the Employer shall be empowered to call in sufficient of the Advance payment bank guarantee to cover the said balance.

The Employer shall be empowered to call in the guarantee in whole or in part(s) if the Contractor defaults in the repayment(s) for any reason(s).

Sub-Clause 14.5 Plant and Materials intended for the Works

Add the following paragraph as sub-clause 14.5 (d) for Secured Advance on non-perishable materials and sub-clauses (a), (b) and (c) will be applicable for plants only.

- I. The Contractor shall be entitled to receive from the procuring agency Secured Advance against an INDENTURE BOND in Public Works Account Form No.31 (Fin. R. Form No. 2) acceptable to the procuring agency of such sum as the Engineer may consider proper in respect of non-perishable materials brought at the site but not yet incorporated in the Permanent Works provided that:
 - i. The material are in accordance with the specifications for the permanent works;
 - ii. Such materials have been delivered to the site and are properly stored and protected against loss or damage or deterioration to the satisfaction and verification of the Engineer/Assistant Engineer but at the risk and cost of the Contractor;
 - iii. The Contractor"s records of the requirements, orders, receipts and use of materials are kept I a form approved by the Engineer, and such records shall be available for inspection by the Engineer.
 - iv. The Contractor shall submit with his monthly statement the estimated value of the materials on site together with such documents as may be required by the Engineer for the purpose of valuation of materials and providing evidence of ownership and payment therefore;
 - Ownership of such materials shall be deemed to vest in the procuring agency and these materials shall not be removed from the site or otherwise disposed of without written permission of the procuring agency;
 - vi. The sum payable for such materials on site shall not exceed 75% ex-factory / ex-warehouse price of locally manufactured or produced materials, or (iii) market price of stands other materials;
 - vii. Secured Advance shall not be allowed unless and until the previous advance, if any, is fully recovered;
 - viii. Detailed account of advances must be kept in part II of running account bill or a separate statement; and
 - ix. Secured Advance may be permitted only against materials/quantities anticipated to be consumed / utilized on the work within a period of 3 months from the date of issue of secured advance and in no case for full quantities of materials for the entire work/contract.

II. Recovery of Secured Advance:

Secured Advance paid on non-perishable materials to the Contractor under the above provisions shall be affected from the

	monthly payments on actual consumption basis, but not later than period specified in the rules not more than three months (even if unutilized).
Sub-Clause 14.8	Second Para is replaced with following text:
Delayed Payment	In the event of the failure of the Procuring Agency to make the payment within the time stated, the procuring agency shall pay to the contractor the compensation oat rate of KIBOR+2% per annum in local currency, upon all sums to be paid from the date of which the same would have been paid.
Sub-Cause 14.15	Currency of Payment is Pakistan Rupee (PKR).
Currencies of Payment	L
Sub-Clause 15.2	Insert following as paragraph (g) after paragraph (f)
Termination by Employer	(g) If the progress of works with respect to the Programme of Works is observed to be behind the approved program of works pursuant to Sub Clause 8.7 for three consecutive months.
	The following Para is added at the end of the sub-clause:
	Provided further, that in addition to the action taken by the procuring agency against the Contractor under this Clause, the procuring agency may also refer the case of default of the Contractor to Pakistan Engineering Council for punitive action under the Construction and Operation of Engineering Works Bye-Laws 1987, as amended from time to time.
Sub-Clause 15.6	The following text is to be added as 3rd paragraph:
Corrupt and Fraudulent Practices	Successful Contractor has to provide Integrity Pact (for contracts worth Rs.10.0 million and above). If the Contractor or any of his Subcontractors, agents or servants is found to have violated or involved in violation of the Integrity Pact signed by the Contractor as Appendix-L to his Bid, then the procuring agency shall be entitled to:
	a. recover from the Contractor an amount equivalent to ten times the sum of any commission, gratification, bribe, finder"s fee or kickback given by the Contractor or any of his Subcontractors, agents or servants;
	b. terminate the Contract; and
	c. recover from the Contractor any loss or damage to the procuring agency as a result of such termination or of any other corrupt business practices of the Contractor or any of his Subcontractors, agents or servants.
	The termination under sub-para (b) of this Sub-Clause shall proceed in the manner prescribed under sub-clauses 15.2 & 15.5 and the payment under Sub-Clause 15.4 shall be made after having deducted the amounts due to the procuring agency under Sub-Para (a) and (c) of this Sub-Clause.

Sub-Clause 16.1	Delete words " Sub-Clause 2.4 [Employer's Financial
Contractor's Entitlement	Arrangements] or" from first paragraph
to Suspend Work	Delete paragraph 2 <i>in entirety</i> (i.e. from words "Notwithstanding" to "notification from the bank".
Sub-Clause 16.2 Termination by Contractor	Delete paragraph (a) in entirety.
Sub-Clause 17.3 Employer's Risks	Delete paragraph (a) in entirety.
Sub-Clause 18.1 General Requirements for Insurance	Add following text The contractor shall be obliged to place all insurances relating to the contract (including, but not limited to, the insurances referred to in Clauses 18.1,18.2,18.3,18.4) with Insurance Company having at least AA rating from PACRA/JCR in favour of the Employer valid for a period 28 days after the expiry of Defects Liability Period. Costs of such insurances shall be borne by the contractor.
Sub-Clause 19.6 Optional Termination, Payment and release by the Employer	Delete paragraph (c), (d) and (e) in entirety.
Sub-Clause 20.1 Contractor's Claims	Insert following at the end of Sub-Clause 20.1 The Contractor shall not be entitled for any extension of Time for Completion and/or additional payment in respect of the claim(s) if the Contractor fails to comply with the requirements or any of the requirement of Sub-Clause 20.1 within the time period stipulated there in the Clause above mentioned and or fails in keeping and producing necessary records whenever demanded by the Engineer.
Sub-Clause 20.6 Arbitration	 Any dispute in respect of which: a. the decision, of the Dispute Board has not become final and binding pursuant to sub-clause 20.2, and b. amicable settlement has not been reached within the period stated in sub-clause 20.5, shall be finally settled, under the provisions of the Arbitration Act, 1940 as amended or any statutory modification/Rules of Conciliation And Arbitration PEC Islamabad or re-enactment thereof for the time being in force. The place of arbitration shall be Karachi, in Sindh Province. The arbitrators shall have full power to open up, review and revise any certificate, determination, instruction, opinion or valuation of the Engineer, and any decision of the DB, relevant to the dispute. Nothing shall disqualify representatives of the Parties and the

Engineer from being called as a witness and giving evidence before the arbitrators on any matter whatsoever relevant to the dispute.

Neither Party shall be limited in the proceedings before the arbitrators to the evidence or arguments previously put before the DB to obtain its decision, or to the reasons for dissatisfaction given in its notice of dissatisfaction. Any decision of the DB shall be admissible in evidence in the arbitration.

Arbitration shall be commenced after completion of the Works. The obligations of the Parties, the Engineer and the DB shall not be altered by reason of any arbitration.

APPENDIX: DISPUTE BOARD

General Conditions of Dispute Board Agreement

1. Definitions

Each "Dispute Board Agreement" is a tripartite agreement by and between:

- (a) the "Employer";
- (b) the "Contractor"; and
- (c) the "Member" who IS defined m the Dispute Board Agreement as being:
 - (i) the-sole member of the "DB" and, where this is the case, all references to the "Other Members" do not apply, or
 - (ii) one of the three persons who are jointly-called the "DB" (or "Dispute Board") and, where this is the case, the other two persons are called the "Other Members."

The Employer and the Contractor have entered (or intend to enter) into a contract, which is called the "Contract" and is defined in the Dispute Board Agreement, which incorporates this Appendix. In the Dispute Board Agreement, words and expressions which are not otherwise defined shall have the meanings assigned to them in the Contract

2. General Provisions

Unless otherwise stated in the Dispute Board Agreement, it shall take effect on the latest of the following dates:

- (a) the Commencement Date defined in the Contract,
- (b) when the Employer, the Contractor and the Member have each signed the Dispute Board Agreement, or
- (c) when the Employer, the Contractor and each of the Other Members (if any) have respectively each signed a dispute board agreement.

This employment of the Member is a personal appointment. At any time, the Member may give not less than 70 days' notice of resignation to the Employer and to the Contractor, and the Dispute Agreement shall terminate upon the expiry of this period.

3. Warranties

The Member warrants and agrees that he/she is and shall be impartial and independent of the Employer, the Contractor and the Engineer. The Member shall promptly disclose, to each of them and to the Other Members (if any), any fact or circumstance which might appear inconsistent with his/her warranty and agreement of impartiality and independence.

When appointing the Member, the Employer and the Contractor relied upon the Member's representations that he/she is:

- (a) experienced in the work which the Contractor is to carry out under the Contract,
- (b) experienced in the interpretation of contract documentation, and
- (c) fluent in the language for communications defined in the Contract.

4. General Obligations of the Member

The Member shall:

- (a) have no interest financial or otherwise in the Employer, the Contractor or Engineer, nor any financial interest in the Contract except for · payment under the Dispute Board Agreement;
- (b) not previously have been employed as a consultant or otherwise by the Employer, the Contractor or the Engineer, except in such circumstances as were disclosed in writing to the Employer and the Contractor before they signed the Dispute Board Agreement;
- (c) have disclosed in writing to the Employer, the Contractor and the Other Members (if any), before entering into the Dispute Board Agreement and to his/her best knowledge and recollection, any professional or personal relationships with any director, officer or employee of the Employer, the Contractor or the Engineer, and any previous involvement in the overall project of which the Contract forms part;
- (d) not, for the duration of the Dispute Board Agreement, be employed as a consultant or otherwise by the Employer, the Contractor or the Engineer, except as may be agreed in writing by the Employer, the Contractor and the Other Members (if any);
- (e) comply with the annexed procedural rules and with Sub• Clause 20.4 of the Conditions of Contract;
- (f) not give advice to the Employer, the Contractor, the Employer's Personnel or the Contractor's Personnel concerning the conduct of the Contract, other than in accordance with the annexed procedural rules;
- (g) not while a Member enter into discussions or make any agreement with the Employer, the Contractor or the Engineer regarding employment by any of them, whether as a consultant or otherwise, after ceasing to act under the Dispute Board Agreement;
- (h) ensure his/her availability for all site visits and hearings as are necessary;
- (i) become conversant with the Contract and with the progress of the Works (and of any other parts of the project of which the Contract forms part) by studying all documents received which shall be maintained in a current working file;
- (j) treat the details of the Contract and all the DB's activities and hearings as private and confidential, and not publish or disclose

them without the prior written consent of the Employer, the Contractor and the Other Members (if any); and

(k) be available to give advice and opinions, on any matter relevant to the Contract when requested by both the Employer and the Contractor, subject to the agreement of the Other Members (if any).

5. General Obligations of the Employer and the Contractor

The Employer, the Contractor, the Employer's Personnel and the Contractor's Personnel shall not request advice from or consultation with the Member regarding the Contract, otherwise than in the normal course of the DB's activities under the Contract and the Dispute Board Agreement. The Employer and the Contractor shall be responsible for compliance with this provision, by the Employer's Personnel and the Contractor's Personnel" respectively.

The Employer and the Contractor undertake to each other and to the Member that the Member shall not, except as otherwise agreed in writing by the Employer, the Contractor, the Member and the Other Members (if any):

- (a) be appointed as an arbitrator in any arbitration under the Contract;
- (b) be called as a witness to give evidence concerning any dispute before arbitrator(s) appointed for any arbitration under the Contract; or
- (c) be liable for any claims for anything done or omitted in the discharge or purported discharge of the Member's functions, unless the act or omission is shown to have been in bad faith.

The Employer and the Contractor hereby jointly and severally indemnify and hold the Member harmless against and from claims from which he is relieved from liability under the preceding paragraph.

Whenever the Employer or the Contractor refers a dispute to the DB under Sub-Clause 20.4 of the Conditions of Contract, which will require the Member to make a site visit and attend a hearing, the Employer or the Contractor shall provide appropriate security for a sum equivalent to the reasonable expenses to be incurred by the Member. No account shall be taken of any other payment due or paid to the Member.

6. Payment

The Member shall be paid as follows, in the currency named in the Dispute Board Agreement:

- (a) a retainer fee per calendar month, which shall be considered as payment in full for:
 - (i) being available on 28 days' notice for all site visits and hearings;
 - (ii) becoming and remaining conversant with all project

developments and maintaining relevant files;

- (iii) all office and overhead expenses including secretarial services, photocopying and office supplies incurred in connection with his duties; and
- (iv) all services performed hereunder except those referred to in sub-paragraphs (b) and (c) of this Clause.

The retainer fee shall be paid with effect from the last day of the calendar month in which the Dispute Board Agreement becomes effective; until the last day of the calendar month in which the Taking-Over Certificate is issued for the whole of the Works.

With effect from the first day of the calendar month following the month in which the Taking-Over Certificate is issued for the whole of the Works, the retainer fee shall be reduced by one third. This reduced fee shall be paid until the first day of the calendar month in which the Member resigns or the Dispute Board Agreement is otherwise terminated.

- (b) a daily fee which shall be considered as payment in full for:
 - (i) each day or part of a day up to a maximum of two days' travel time in each direction for the journey between the Member's home and the site, or another location of a meeting with the Other Members (if any);
 - (ii) each working day on Site visits, hearings or preparing decisions; and
 - (iii) each day spent reading submissions in preparation for a hearing.
- (c) all reasonable expenses including necessary travel expenses (air fare in less than first class, hotel and subsistence and other direct travel expenses) incurred in connection with the Member's duties, as well as the cost of telephone calls, courier charges, faxes and telexes: a receipt shall be required for each item in excess of five percent of the daily fee referred to in sub-paragraph (b) of this Clause;
- (d) any taxes properly levied in the Country on payments made to the Member (unless a national or permanent resident of the Country) under this Clause 6.

The retainer and daily fees shall be as specified in the Dispute e Board Agreement. Unless it specifies otherwise, these fees shall remain fixed for the first 24 calendar months, and shall thereafter be adjusted by agreement between the Employer, the Contractor and the Member, at each anniversary of the date on which the Dispute Board Agreement became effective.

If the parties fail to agree on the retainer fee or the daily fee, the appointing entity or official named in the Contract Data shall determine the amount of the fees to be used.

The Member shall submit invoices for payment of the monthly retainer and air fares quarterly in advance. Invoices for other expenses and for daily fees shall be submitted following the conclusion of a site visit or hearing. All invoices shall be accompanied by a brief description of activities performed during the relevant period and shall be addressed to the Contractor.

The Contractor shall pay each of the Member's invoices in full within 56 calendar days after receiving each invoice and shall apply to the Employer (in the Statements under the Contract) for reimbursement of one-half of the amounts of these invoices. The Employer shall then pay the Contractor in accordance with the Contract.

If the Contractor fails to pay to the Member the amount to which he/she is entitled under the Dispute Board Agreement, the Employer shall pay the amount due to the Member and any other amount which may be required to maintain the operation of the DB; and without prejudice to the Employer's rights or remedies. In addition to all other rights arising from this default, the Employer shall be entitled to reimbursement of all sums paid in excess of one-half of these payments, plus all costs of recovering these sums and financing charges calculated at the rate specified in Sub-Clause 14.8 of the Conditions of Contract.

If the Member does not receive payment of the amount due within 70 days after submitting a valid invoice, the Member may (i) suspend his/her services (without notice) until the payment is received, and/or (ii) resign his/her appointment by giving notice under Clause 7.

7. Termination

At any time: (i) the Employer and the Contractor may jointly terminate the Dispute Board Agreement by giving 42 days' notice to the Member; or (ii) the Member may resign as provided for in Clause 2.

If the Member fails to comply with the Dispute Board Agreement, the Employer and the Contractor may, without prejudice to their other rights, terminate it by notice to the Member. The notice shall take effect when received by the Member.

If the Employer or the Contractor fails to comply with the Dispute Board Agreement, the Member may, without prejudice e to his other rights, terminate it by notice to the Employer and the Contractor. The notice shall take effect when received by them both.

Any such notice, resignation and termination shall be final and binding on the Employer, the Contractor and the Member. However, a notice by the Employer or the Contractor, but not by both, shall be of no effect.

8. Default of the Member

If the Member fails to comply with any of his obligations under Clause 4 (a) - (d) above, he shall not be entitled to any fees or expenses

hereunder and shall, without prejudice to their other rights, reimburse each of the Employer and the Contractor for any fees and expenses received by the Member and the Other Members (if any), for proceedings or decisions (if any) of the DB which are rendered void or ineffective by the said failure to comply.

If the Member fails to comply with any of his obligations under Clause 4 (e) - (k) above, he shall not be entitled to any fees or expenses hereunder from the date and to the extent of the non-compliance and shall, without prejudice to their other rights, reimburse · each of the Employer and the Contractor for any fees and expenses already received by the Member, for proceedings or decisions (if any) of the DB which are rendered void or ineffective by the said failure to comply.

9. Disputes

Any dispute or claim arising out of or in connection with this Dispute Board Agreement, or the breach, termination or invalidity thereof, shall be finally settled by institutional arbitration. If no other arbitration institute is agreed, the arbitration shall be conducted under the Rules of Arbitration of the International Chamber of Commerce by one arbitrator appointed in accordance with these Rules of Arbitration.

Annex: Procedural Rules

Unless otherwise agreed by the Employer and the Contractor, the DB shall visit the site at intervals of not more than 140 days, including times of critical construction events, at the request of either the Employer or the Contractor. Unless otherwise agreed by the Employer, the Contractor and the DB, the period between consecutive visits shall not be less than 70 days, except as required to convene a hearing as described below.

The timing of and agenda for each site visit shall be as agreed jointly by the DB, the Employer and the Contractor, or in the absence of agreement, shall be decided by the DB. The purpose of site visits is to enable the DB to become and remain acquainted with the progress of the Works and of any actual or potential problems or claims, and, as far as reasonable, to endeavour to prevent potential problems or claims from becoming disputes.

Site visits shall be attended by the Employer, the Contractor and the Engineer and shall be coordinated by the Employer in co-operation with the Contractor. The Employer shall ensure the provision of appropriate conference facilities and secretarial and copying services. At the conclusion of each site visit and before leaving the site, the DB shall prepare a report on its activities during the visit and shall send copies to the Employer and the Contractor.

The Employer and the Contractor shall furnish to the DB one copy of all documents which the DB may request, including Contract documents, progress reports, variation instructions, certificates and other documents pertinent to the performance of the Contract. All communications between the DB and the Employer or the Contractor shall be copied to the other Party. If the DB comprises three persons, the Employer and the Contractor shall send copies of these requested documents and these communications to each of these persons.

If any dispute is referred to the DB in accordance with Sub-Clause 20.4 of the Conditions of Contract, the DB shall proceed in accordance with Sub-Clause 20.4 and these Rules. Subject to the time allowed to give notice of a decision and other relevant factors, the DB shall:

- (a) act fairly and impartially as between the Employer and the Contractor, giving each of them a reasonable opportunity of putting his case and responding to the other's case, and
- (b) adopt procedures suitable to the dispute, avoiding unnecessary delay or expense.

The DB may conduct a hearing on the dispute, in which event it will decide on the date and place for the hearing and may request that written documentation and arguments from the Employer and the Contractor be presented to it prior to or at the hearing.

Except as otherwise agreed in writing by the Employer and the Contractor, the DB shall have power to adopt an inquisitorial procedure, to refuse admission to hearings or audience at hearings to any persons other than representatives of the Employer, the Contractor and the Engineer, and to proceed in the absence of any party who the DB is satisfied received notice of the hearing; but shall have discretion to decide whether and to what extent this power may be exercised.

The Employer and the Contractor empower the DB, among other things, to:

- (a) establish the procedure to be applied in deciding a dispute,
- (b) decide upon the DB's own jurisdiction, and as to the scope of any dispute referred to it,

- (c) conduct any hearing as it thinks fit, not being bound by any rules or procedures other than those contained in the Contract and these Rules,
- (d) take the initiative in ascertaining the facts and matters required for a decision,
- (e) make use of its own specialist knowledge, if any,
- (f) decide upon the payment of financing charges in accordance with the Contract,
- (g) decide upon any provisional relief such as interim or conservatory measures, and
- (h) open up, review and revise any certificate, decision, determination, instruction, opinion or valuation of the Engineer, relevant to the dispute.

The DB shall not express any opinions during any hearing concerning the merits of any arguments advanced by the Parties; thereafter, the DB shall make and give its decision in accordance with Sub-Clause 20.4, or as otherwise agreed by the Employer and the Contractor in writing. If the DB comprises three persons:

- (a) it shall convene in private after a hearing, in order to have discussions and prepare its decision:
- (b) it shall endeavor to reach a unanimous decision: if this proves impossible the applicable decision shall be made by a majority of the Members, who may require the minority Member to prepare a written report for submission to the Employer and the Contractor; and
- (c) if a Member fails to attend a meeting or hearing, or to fulfil any required function, the other two Members may nevertheless proceed to make a decision, unless:
 - i. either the Employer or the Contractor does not agree that they do so, or
 - ii. the absent Member is the chairman and he/she instructs the other Members not to make a decision.

SPECIAL PROVISION

SP-1 NOT USED

SP-2 ENGINEER'S FACILITIES

SCOPE

- a) The Contractor shall provide, properly maintained and serviced, facilities for the Engineer (the "Engineer's Facilities") comprising of an office, (the Engineer's Office"), Survey Equipment (the Engineer's Survey Equipment") and Vehicles (the "Engineer's Vehicles") as specified hereinafter for the exclusive use of the Engineer during the whole Contract period.
- b) The Contractor shall provide and pay for all consumables, the consumption of electricity, gas and water, and provide and pay for all other incidental and running costs related to the Engineer's Facilities.
- c) The Engineer's Facilities shall be available and ready for use within 15 (Fifteen) days of the Commencement Date during this period of 15 days the contractor shall make an interim arrangement at his own cost by hiring suitable and acceptable office/vehicles etc. to serve the purpose to the satisfaction of the Engineer.
- d) The Contractor shall be responsible for and take all necessary measures to ensure the security of the Engineer Office and its contents at all times and shall employ watchmen for this purpose.
- e) The Engineer's facilities shall be provided as per the requirements set forth in relevant SPs, under the pay item on the respective BOQ.
- f) All facilities shall be provided by the Contractor for entire contract period. After expiry of the contract period, all facilities shall become the property of the Contractor except.

SITE LOCATION/LAYOUT

- a) The location/layouts of the sites for the Engineer's Office is to be agreed by the Engineer and should take into account the following general requirements:
- b) Safe access from the public road.
- c) Paved areas for vehicle movement.
- d) Covered areas for vehicle parking.
- e) Dust suppression in unpaved areas.
- f) Grading of the site to provide drainage.
- g) Separate foul and surface water drainage system, with outfall arid treatment as appropriate. Septic tanks being suitably distanced from and down-wind of occupied buildings.
- h) Standby electrical generating capacity located and protected to avoid noise nuisance.
- i) Suitable and convenient covered areas for storage of materials samples.
- j) Ducts, cables, pipes and sewers for services and drainage.
- k) A car washing area with a water source and proper drainage.

- l) Areas of visual amenity having trees, flower beds, shrubs and so forth, with a water source nearby.
- m) Security measures comprising perimeter fencing or walls, gates and guardhouses.

UTILITIES

- a) Back-up electrical power supply by diesel generator (with Canopy) shall be provided.
- b) The generator shall have an automatic cut-in in case of failure of the main supply. The power circuit shall be equipped with voltage regulation to protect electrical equipment from overload and to ensure proper operation of computers and the like.
- c) A continuous water supply shall be available for normal use. All kitchens shall be provided with potable water and the source shall be tested and certified by the Contractor at least monthly or at shorter intervals as directed by the Engineer.
- d) Continuous supplies of water, gas, electricity and fuel for the stand-by generator shall be provided by the Contractor who shall be responsible for and pay all costs of installation, connection, maintenance and use. Fuel stored at site shall be protected against fire.
- e) The Contractor shall take appropriate measures to discourage the presence or entry of termites, cockroaches, vermin and the like. Such measures may include chemical treatment of foundations, sealing of joints in construction and periodic fumigation.
- f) Contractor shall be responsible to do all the formalities in acquiring and installing the Gas, Telephone, Water and Electricity connection for the respective building required under this SP.

COMMUNICATIONS

1. The Contractor will be required to pay for the cost of telephone calls (Mobile Telephones) made by the Engineer and his staff up to a total cost of Rs. 10,000 per calendar month.

ESTABLISHMENT

- 1. Within 7 (Seven) days of the Commencement Date the Contractor shall submit to the Engineer the details of furniture and equipment for the Engineer's Office. The rental or office or Porta Cabins shall also be arranged within this period.
- 2. Within 7 (Seven) days of receiving the Contractor's proposal the Engineer will approve them with any necessary modifications and will instruct the Contractor to proceed with the procurement of the furnishings and equipment.

The Engineer's all Facilities (Offices, Vehicles, Survey Equipment, other equipment, furniture, fixtures, fittings etc.) provided as per relevant SPs shall become the property of the Contractor three (03) months after the date of issue of the Completion/Taking-Over Certificate(s).

SP-3 ENGINEER'S OFFICE

SCOPE

The contractor shall provide the Engineer's office (2 no 8'x20') Porta Cabins or at• least four rooms rental building for each scheme (i.e. total 4 nos.).

- a) The Contractor's Office will be situated adjacent to but at a reasonable distance from the Engineer's Office.
- b) The Contractor shall maintain the Engineer's Office in good condition to the satisfaction of the Engineer for as long as required for the purposes of the Contract.
- c) The Contractor shall provide the Engineer with at-least two office messengers and pay for the same.
- d) The office shall be provided with underground and overhead water reservoirs of adequate capacity.
- e) The office shall be provided with all facilities in accordance with SP-2.
- f) The Engineer's office along with fittings, equipment and furnishings will be handed over to the Contractor three six months after the date of issue of the Completion/Taking over Certificate(s).

FURNITURE AND EQUIPMENT

In addition to normal stationery requirements, the Contractor shall provide for the Engineer's Office, furnishings and equipment complying at least to the following list, all to the approval of the Engineer and all for the exclusive use of the Engineer.

No. ITEM

OFFICE FURNITURE

- 8 Standard office desks with lockable drawers and glass top
- 4 Small tables
- 10 Swivel type padded desk chairs with arms and castors
- 1 Executive desk with lockable drawers and glass top with computer table
- 1 Executive type upholstered desk chair
- 1 Secretary's desk with chair and matching computer table
- 10 Standard office chairs
- 4 Lockable metal filing cabinets for drawings (1.0 x 0.80 x 0.75) m with 4 No. Drawers
- 3 Metal cabinets with two lockable doors and five shelves 0.95m x 0.50m x 1.85m high
- 3 Metal filing cabinets with four lockable drawers
- 5 Book cases with two shelves

- 3 Display boards
- 4 Metal waste baskets
- 4 Office clock, battery powered
- 4 Plastic trash containers, 500 n1m diameter minimum by 750 mm high.
- 1 Electric water coolers
- 1 Desk lamps, fluorescent, 20 watts
- 4 Split type Air conditioners or as required
- 8 Standard size staplers
- 1 Heavy duty staplers
- 4 Paper cutters
- 1 Paper hole punches, heavy duty
- 10 Paper hole punches, light duty
- 1 Pairs of scissors, heavy duty
- 2 Pencil sharpeners, desk mounted
- 4 Calculators Scientific
- Digital Camera, 35 mm single lens reflex Canon/Nikkon or similar, 35-150 mm zoom lens, electronic flash gun, carrying case, filters
- 4 Fire extinguishers (carbon dioxide), wall-hung

COMPUTER EQUIPMENT

- 2 Desktop PC latest with all accessories
- 1 Laser Printer (A3 + A4 paper size)
- 1 Colour Laser Printer A3 paper size
- 2 Uninterruptible Power supplies, 1 KVA.
- Copies of the latest versions of the following PC software Windows 7 and latest MS Office
 - AutoCAD (latest version)

MISCELLANEOUS

- 2 Oxford Shorter English Dictionary (Soft/Hard copy)
- 2 English Urdu and Urdu English dictionaries
- 20 Construction hard hats, Safety Shoos, Jackets etc.

Consumables including camera film, batteries for clocks and calculators, paper, cartages and all other office supplies as required.

Venetian blinds and cotton curtains on all windows

KITCHEN

- 1 Double stainless-steel sink with drain board
- 1 Electric refrigerator, 0.50 cu.m capacity with separate freezer compartment, selfdefrost type
- 1 Gas stove with oven, four burners, and gas bottles as required.
- 1 Set of kitchen cabinets, lockable, with Formica top
- 1 Electric kettle
- 1 Electric coffee maker
- 1 Water heater, 60 liters per minutes
- 6 Tea towels
- 2 Towel racks
- 1 Exhaust fan

Tea pot, coffee pot, cups, saucers, glasses, spoons and serving trays for 24 persons

LAVATORIES

- 4 Hot water heaters, 6 liters per minute
- 4 Water closets, pedestal style
- 4 Wash basins with hot and cold water
- 4 Stainless steel lavatory paper holders
- 4 Paper towel dispensers
- 4 Mirrors, 400 mm x 500 mm
- 4 Ceramic urinals
- 4 Exhaust fan, Y2 HP, 220 Volt

MEASUREMENT & PAYMENT

The Work under these clause of SP shall not be paid separately. The incurred in this respect shall be deemed to have included in other items/overhead cost.

SP-4 TESTING OF MATERIAL THROUGH PRIVATE LABORATORY

The Contractor for the duration of the Contract shall arrange all quality tests required for the satisfactory execution of work through private laboratories.

The purpose of testing material and other construction activities as per the requirement of the Engineer, specifications and drawings, the Contractor shall propose three private laboratories to the Engineer for approval.

The cost of testing of material through private laboratory(ies) shall not be paid separately.

The work under this SP-4 shall neither be measured nor be paid separately. The cost incurred in this respect shall be deemed to have been included in other items of work.

In case of failure of the contractor to comply with all or any provision(s) of this SP-4, the damage(s) caused shall be attributable towards the Contractor, and the Engineer shall assess the amount of such damage(s) which shall be deducted from the monies due or to become due to the Contractor.

SP-5 MAINTENANCE OF ENGINEER'S OFFICE

SCOPE

- 1. The Contractor shall maintain the Engineer's Office in all respects, including all repairs and replacements of any item and the supply of all consumables.
- 2. The Contractor shall provide all necessary janitorial services and supplies for the Engineer's Office. The services shall include normal domestic servicing and cleaning, including lavatories and bathrooms, washing windows and so forth. Janitorial services shall be performed on a daily basis with personnel and to a programme of work approved by the Engineer.
- 3. The Contractor shall maintain the Engineer's Office in a neat, hygienic and attractive manner and provide daily garbage collection and disposal services.
- 4. The Contractor shall maintain fire extinguishers and air-conditioners as recommended by their manufacturers and shall clean and replace air-conditioner air filters at regular intervals of one month, or more frequently if required by service conditions or as otherwise directed by the Engineer.
- 5. The Contractor shall provide guard services for the Engineer's Office on a twenty• four-hour basis. The suitability, number and work schedule of all guard personnel shall be approved by the Engineer.
- 6. The maintenance of Engineer's Office shall also include payment of all utilities bills such as Gas, Mobile Telephone, Electricity and water etc. by the Contractor which shall not be paid separately and shall be deemed to be included in maintenance per month cost under the respective BOQ items of SP-5.
- 7. The Contractor shall provide these services from the date of acceptance of the individual facilities by the Engineer till three months after the issuance of the Completion/Taking-Over Certificate(s).

SP-6 ENGINEER'S SURVEY EQUIPMENT

SCOPE

- The Contractor shall provide and maintain survey equipment for the use of the Engineer. All the survey equipment shall be new and shall be maintained throughout the Contract and replaced by the Contractor free of charge in case of damage or loss due to any caused. The Contractor shall also arrange calibration of all surveying equipment after every two months.
- 2. The Contractor shall provide and pay for experienced survey helpers for the Engineer as required by the Engineer. .
- 3. The survey equipment after the completion of the project shall become the property of the Contractor.

EQUIPMENT

The Contractor shall provide and maintain the following survey equipment:

	No.	ITEM						
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- 1 Total Station survey units complete
- 1 Total Station accessories complete as under:
- Interface Cable
- Comms Plus Unit
- Precision Wooden Tripod
- 1 Single Tilting Range Pole Prism complete as under:
- Prism
- Single Tilting Mount with Coaxial Target
- Range Pole Telescopic Tripod with Soft Case
- 2 m Telescopic Range Pole
- Range Pole Level
- Soft Case
- 1 Single Tilting Prism with Coaxial Target complete as under:
- Prism
- Single Tilting Mount with Coaxial Target
- Simple Carrier
- Tribrach with Optical Plummet
- Soft
- 1 Triple Tilting Prism with Coaxial Target complete as under:
- Prism

- Triple Tilting Mount with Coaxial Target
- Simple Carrier
- Tribrach with optical plummet
- Soft case
- 2 Aluminum Telescopic Tripod
- 2 1 m Range Pole for Extension
- 1 Automatic Level complete
- 1 Aluminum Telescopic Tripod
- 3 Leveling Staff (local manufacture)
- 2 Range Pole Level
- 6 Steel measuring tape, 50 m long
- 6 Steel measuring tape, 20 m long
- 25 Steel measuring tape, 3 m long
- Measuring rod (4 m)
- 18 Ranging rod with tripod

CONSUMABLES

The Contractor shall provide adequate supplies of expendable materials, such as pencils, rubbers, inks, notebooks, drawing paper, survey pegs, brushes, paints etc. as required by the Engineer.

SP-7 ENGINEER'S VEHICLES

SCOPE

- 1. The Contractor shall provide, maintain and make available at all times for the exclusive use of the Engineer the following vehicles on rental basis, the number and type of each being as specified below:
 - i. Suzuki Cultus A/C and CNG------ 1 nos
 - ii. Suzuki Bolan A/C and CNG ----- 1 nos
 - iii. Honda CD-70 Motorcycles ----- 2 nos

All vehicles except motorcycles shall be air-conditioned.

- 2. All vehicles shall be fitted with 3-point inertia-reel seat belts for all occupants.
- 3. All the vehicles shall be provided for the Engineer's use within 15 days from the Start Date.
- 4. If the Contractor fails to provide the vehicles within the time specified, the cost incurred by the Employer in renting similar replacement vehicles plus a 20% (twenty percent) overhead charge shall be payable by the Contractor.
- 5. The vehicles shall be registered, taxed, comprehensively insured, fueled, repaired, serviced, cleaned and maintained by the Contractor for the duration of the Contract plus three months and temporarily replaced if, in the Engineer's opinion, any vehicle is not in a roadworthy condition.
- 6. The Contractor shall provide safe, experienced and competent drivers for all the vehicles except motorcycles, for the approval of the Engineer. Each driver shall be responsible for the vehicle allocated to him for the duration of the Contract. The Contractor shall promptly replace any driver who, in the Engineer"s opinion, is not satisfactory.
- 7. The Engineer's vehicles shall become the property of the Contractor three months after the issuance of Completion/Taking Over Certificate(s).

SP-8 NOT USED

SP-9 NOT USED

SP-10 PROTECTION OF THE ENVIRONMENT

General

The Contractor shall take all necessary measures and precautions and otherwise ensure that the execution of the works and all associated operations on-site are carried out in conformity with statutory and regulatory environmental requirements of Federal & Provincial Environmental Protection Agencies (EPA's) including those prescribed elsewhere in this document.

The Contractor shall take all the measures and precautions to avoid any nuisance or disturbance arising from the execution of the works. This shall wherever possible be achieved by suppression of the nuisance at source rather than abatement of the nuisance once generated; The provision of this SP shall, however, be disregarded in respect of emergency work required for saving life or the safety of the works. However, after completing such works of emergent nature, suitable environmental mitigation measures will be adopted by the contractor with the approval of Engineer.

In the event of any spoil or debris or silt from the sites being deposited on adjacent land, the Contractor shall immediately remove such spoils, debris or silt and restore the affected areas to its original state to the satisfaction of both the Engineer and the landowner.

Surplus excavation materials and topsoil shall, wherever possible, be used to reinstate quarries or borrow pits or other areas as may be approved by the Engineer. Such materials should be spread in such a manner as to limit subsequent erosion and the site shall be revegetated as existing ground cover dictates.

Borrow-Pits for Embankment Construction

Borrow-pits shall not be 'dug in the-right of way of the road. However, even outside the ROW, depending upon type of soil strata, depth of water table, ground topography and prevalent vegetation state etc, a minimum distance for such borrow areas will be prespecified by the Engineer. The main ruling factors for determining such distances will be the highway safety from capillary action where pore pressure may damage the pavement and the water stagnation, becoming a source of disease vector.

Quarry Operations

The Contractor shall obtain materials from licensed and government approved quarries only. The quarry operation shall be undertaken within the purview of the rules and regulations in force.

Soil Erosion and Sedimentation Control

The Contractor shall carry out the works in such a manner that soil erosion is fully controlled, and sedimentation and pollution of natural watercourses, ponds, tanks and reservoirs is avoided. At suitable places sedimentation basin with impervious linings will be constructed for containing, stopping and trapping any silt run off for premature siltation of downstream watercourses and reservoirs.

Conservation of Fauna and Flora

The Contractor shall adopt all measures and take necessary precautions to avoid disturbance to fauna and flora, as far as possible. Felling of trees and removal of vegetation for fuel or other uses will not be practiced.

Fuel and Chemical Storage

All fuel and chemical storage shall be sited on an impervious base within an embanked area and secured by fencing. The storage area shall be located away from any watercourse or wetland. The base and walls of the embankment shall be impermeable and of sufficient capacity to contain 110% of the volume of tanks.

Filling and refueling shall be strictly controlled and subjected to formal procedures. All valves and trigger guns shall be resistant to unauthorized interference and vandalism and be turned off and securely locked when not in use. The contents of any tank or drum shall be clearly marked. Measures shall be taken to ensure that no contamination happens, or discharges enter any drain or water courses.

Water Quality

The Contractor shall prevent any interference with the supply to or abstraction from polluted water sources (including underground percolating water) as a result of execution of the works.

Areas where water is \cdot regularly or repetitively used for dust suppression purposes shall be laid to fall to specially constructed settlement tanks to permit sedimentation of particulate matter. After resettlement, the water may be re• used for dust suppression.

All water and liquid waste products arising on the sites shall be collected and disposed of at location outside or off site and in a manner that shall not cause nuisance or pollution.

The Contractor shall not discharge or deposit any matter arising from the execution of the works into any place except with the permission of the Engineer and the regulatory authorities concerned.

The Contractor shall protect all watercourses, water ways, ditches, canals, drains, lakes and the like from pollution, silting flooding or erosion as a result of the execution of the works.

The Contractor shall submit the details of his temporary drainage works system (including all surface channels, sediment traps, washing basins and discharge-pits) to the Engineer for approval prior to commencing work on its construction.

Air Quality

The Contractor shall devise and arrange methods of working to minimize dust, gaseous or other air borne emissions and carry out the works in such a manner as to minimize adverse impacts on air quality.

Bituminous hot-mix plants and concrete hatching plants shall be located sufficiently away from habitation, agricultural operations or industrial establishments.

The Contractor shall utilize effective after sprays during the delivery and handling of materials when dust is generated and dampen stored material during dry weather.

Stockpiles of materials should be sited in sheltered areas or within hoarding, away from sensitive areas. Stockpiles of friable materials shall be covered with clean tarpaulins with application of sprayed water during dry and windy weather. Stockpiles of debris shall be dampened prior to their movement, except where this is contrary to the specifications.

Any vehicle with an open load carrying area used for transport of potentially dust producing materials shall have properly fitting side and tailboards. Materials having potential to produce dust shall not be loaded to a level higher than the side and tail boards and shall be covered with clean tarpaulin in good condition. The tarpaulin should be properly secured and extended to at least 300 mm over the edges of the sideboard and tailboard.

During high wind, no dust generating operations shall be permitted within 200 m of residential areas having regard to the prevailing direction of the wind.

Construction vehicles and machinery shall be kept in good working order and engine turned off when not in use. Appropriate measures shall be taken to limit exhaust emissions from construction vehicles, machinery and plant and the Contractor shall include details of such proposed measures in the mitigation and monitoring plan to be submitted to the Engineer.

In residential areas or other sensitive areas, such as nurseries, schools, hospitals, etc. advance warning shall be given to potentially affected persons so that some measures can be taken by them before commencement of the works.

Any open vehicle carrying a load of freshly mixed asphalt concrete for transportation and laying the pavement must have a full cover of tarpaulin sheet. In this manner its toxic fumes will be reduced against any atmospheric contamination.

Noise

The Contractor shall consider noise as an environmental concern m his planning and during execution of the works.

The Contractor shall use plant and equipment conforming to international standards and directives on noise, vibrations and emissions shall include the details of measures for abating noise at source in the mitigation and the monitoring plan to be submitted to the Engineer.

Transmission of Diseases

Contractor shall take all necessary measures to prevent transmission of diseases between inhabitants and the labourers engaged for the works, especially with regard to sexually transmitted diseases. The Contractor shall install the necessary medical facilities for this purpose.

The Contractor shall verify that checkup for detecting the occurrence of sexually transmitted diseases amongst the labourers engaged for the works are actually being carried out and submit a certificate to that effect to the Engineer.

Preservation of Archaeological, Cultural, Value and Antiquities

The Contractor shall take all necessary measures to protect any archaeological finds or antiquities as required.

Where antiquities are shown on the drawing or otherwise identified during the course of the works, these shall be protected by means of suitable fencing and barriers to the satisfaction of the Engineer. The Contractor shall provide and maintain access at all time for persons wishing to stop and pay their respects.

Environment Enhancement

All existing highways and roads used by vehicle of the Contractor or any of his sub-contractors or suppliers of materials or plant, and similarly any new roads which are part of the works and which are being used by traffic, shall be kept clean and clear of all dust/mud or other extraneous materials dropped by the said vehicles or their tyres. Similarly, all dust/mud or other extraneous materials from the works spreading on these highways shall be immediately cleared by the Contractor.

Clearance shall be affected immediately by manual sweeping and removal of debris, or, if so, directed by the Engineer, by mechanical sweeping and clearing equipment, and all dust, mud and other debris shall be removed entirely from the road surface. Additionally, if so, directed by the Engineer, the road surface shall be hosed or watered using suitable equipment.

Any structural damage caused to the existing roads by the Contractor's construction equipment shall be made good without any extra cost.

On completion of the works, the Contractor shall reinstate all areas with proper vegetation to the satisfaction of the Engineer.

The Contractor shall remove all old tyres and internal rubes from within the limits of right of way and subject to the agreement of adjacent landowners for additional areas of 75 m on either side of the road centerline. The Contractor shall dispose of all materials in a manner approved by the Engineer.

Where directed by the Engineer, the Contractor shall improve and reinstate the land on which informal roadside service area has been established, by removing all debris and contaminated soils, regarding to natural ground levels and reestablishing the original vegetation where appropriate. All debris and contaminated materials shall be disposed of on site as approved by the Engineer.

Measurement and payment

The work under clause SP-10 (Protection of the Environment) shall neither be measured nor be paid separately. The cost incurred in this respect shall be deemed to have been included in other items of work.

In case of failure of the contractor to comply with all or any provision(s) of this clause the damage(s) caused shall be attributable towards the Contractor, and the Engineer shall assess the amount of such damage(s) which shall be deducted from the monies due or to become due to the Contractor. However, the said amount may be reimbursed to the Contractor on rectification of all damage caused and subsequent certification by the Engineer that the said damage has been rectified by the Contractor at his own cost as per the requirements specified herein above.

Where directed by the Engineer, the Contractor shall improve and reinstate the land on which informal roadside service area has been established, by removing all debris and contaminated soils, regarding to natural ground levels and reestablishing the original vegetation where appropriate. All debris and contaminated materials shall be disposed of on site as approved by the Engineer.

However, for third party monitoring of protection of environment and Environment Mitigation Measures, the Employer is planning to hire the services of third party whose fees will be paid through the Contractor for which Provisional Sum will be provided in the BOQ.

SP-11 HEALTH, SAFETY & ENVIRONMENTAL (HSE)

GENERAL HSE REQUIREMENTS

Compliance to Laws/Regulations/Company Requirements

The Contractor shall comply with all applicable Health, Safety and Environmental (HSE) laws and regulations including fire and security, which are applicable to the location where the works are being carried out.

The Contractor shall indemnify the Employer against all legal costs, fines and compounds imposed arid claims and damages incurred as a result of breach or non-compliance with relevant laws and regulations. Contractor shall comply at all times with the requirements as set forth by the Employer in this contract. These requirements are intended to supplement any known or ought to be known laws and regulations applicable at the location where the works are being carried out.

The Contractor shall take all necessary HSE precautions related to or arising out of the performance of the Contract in order to protect the work, the personnel and property of the Employer, the Engineer, the Contractor, Subcontractor, all third parties and public from the hazards associated with the work.

The Contractor shall implement permits/permission based system for all hazardous activities.

Contractor Written Policy/Organization

The Contractor shall acknowledge the Employer's strong commitment to HSE and affirm that it has a written HSE policy which is a standard comparable to international standards and which has been signed and is actively supported and endorsed by the Contractor's management.

The Contractor shall further affirm that its HSE policy is widely disseminated and understood among the Contractor and Subcontractor's employees.

The work's policy should allow workers to refuse work for non-safe work practices or if they feel that their safety is being jeopardized.

Protection of Employees, Public, Assets and Environment

The Contractor shall protect the safety and health of workers and people living or working near the construction activity from potential hazards created by that activity. The Contractor, without cost to the Employer, must take all necessary precautions to protect the public and minimize disturbance and inconvenience to the public resulting from performance of the work.

Throughout performance of the work, the Contractor shall conduct all operations in such a way as to minimize any impact upon the natural environment including compliance with all laws, regulations and rules applicable to the site. The Contractor agrees to indemnify the Employer and the Engineer and their staff for all claims, damage costs and penalties relating to any environmental damage or loss or non-compliance with any laws or regulations arising out of the Contractor and / or Subcontractor performance of works.

Right to Stop Work

The Engineer or his designated representatives shall have the right to prohibit commencement of works or to stop any works in progress if the equipment, machinery, personnel or work conditions are considered to be unsafe or not to be in compliance with any applicable rules, regulations and procedures.

Stoppage of the work shall be at the Contractor's expense until the Contractor has satisfactorily rectified such unsafe acts and condition. In the event of serious or repeated infringements, the Employer may terminate the contract without compensation.

Maintain Equipment and Machinery in a Safe Condition

The Contractor shall ensure that all Contractor's machinery, plant & equipment, facilities and other items in any way associated with or utilized in the work are fit for use and maintained in a safe and good working condition.

Risk Management and Hazards Identification

The Contractor shall make an initial assessment of the HSE risks involved in the execution of the works. The focus of the assessment should be to evaluate the inherent hazards in conducting the work and the potential adverse consequence of an accident to the workforce, the public and the environment, company assets and reputation.

The Contractor shall take appropriate measures to prevent incidents from occurring and to minimize the consequence of an event should it occur.

The Contractor shall conduct HSE inspections and audits to ensure that such preventive measures are carried out. The Contractor shall promptly conform to all recommendations made pursuant to the said inspections and audits.

Competent Personnel

The Contractor shall ensure that competent personnel are fully trained and certified to carry out the task of operating all machinery, equipment, and tools. The Contractor shall provide an adequate level of technical and HSE related training conducted by a recognized training institution for all relevant personnel in connection with the work. All Contractor's supervisory personnel shall attend relevant HSE training and be competent in hazard identification.

The Contractor shall ensure that all Contractor and Subcontractors personnel engaged in the works are healthy and fit, and possess the experience and skill required to perform the works.

HSE Awareness

The Contractor shall be responsible for maintaining and enhancing the HSE awareness among its personnel and subcontractor's personnel, including arranging safety induction, toolbox, regular HSE meetings and emergency drills.

Findings of hazard identification including Job Safety Analysis shall be communicated to the Contractor's personnel. Copies of minutes of the Contractor's safety meetings shall be submitted to the Engineer.

Incident Reporting

The Contractor shall report to the Engineer immediately of the occurrence of any incident or accident including near misses. The Contractor shall also alert fire brigade, police and /or other authorities relevant to the incidents or accidents. The Contractor shall be responsible for reporting accidents and incidents to relevant Government Agencies.

All incidents or accidents that result in or have the potential to cause serious injury or property damage must be suitably investigated by the Contractor and reported to the Engineer.

The Contractor shall maintain accurate incident and injury reports and shall comply with the Engineer's requests for information relating to accidents, injury or illnesses.

11.1.10Housekeeping

The Contractor shall ensure that good housekeeping is maintained continuously throughout the duration of the work. Due regard being paid to proper disposal of scrap material, tidiness? and clear access ways and emergency exits.

Access and egress of all exits, fire and safety equipment, and work areas must be kept clear of obstructions at all times. Special attention must be given to maintaining clear walkways, removal of slippery and tripping hazards, securing or removing .of loose materials at height, and proper storage of materials. Oily or chemical soaked rags must be disposed of in a proper manner. All housekeeping shall be at The Contractor's cost.

SPECIFIC HSE REQUIREMENTS

Site SHO/Safety Supervisor

The Contractor shall, at Contractor's cost, provide such numbers of qualified Safety and Health Officers (SHO) or supervisors who will be responsible to provide guidance and advice pertaining to Health, Safety and Environment (HSE) requirements of works. He shall guide Contractor's management on hazard assessment and measures, with equal diligence being paid to fulfillment of the contractual technical specifications.

In addition to the ongoing monitoring of the site, the Contractor's SHO or supervisors shall also perform a formal inspection of the site at least once every week to identify and correct any hazardous conditions noted. A written record of all inspections and their status of action follow-ups shall be given to the Engineer.

Prior to start of works, the Contractor shall submit the CV of the proposed SHO or supervisors for the Engineer's approval.

Project HSE Plan

One week, prior to mobilization, the Contractor shall prepare and submit a project specific HSE plan to the Engineer which, as a minimum, describes the followings:

- Prevailing laws and regulations
- Contractor's HSE policy
- Contractor's organization including position for HSE manager
- HSE responsibilities of key personnel

- Hazards review including control and mitigating measures
- Description and schedule of HSE activities
- Accident /incident reporting
- Emergency response plan
- Internal Audit mechanism for improving HSE plans.

The Engineer's review or comments on such plan shall not relieve nor shall such review and comments to be construed as limiting in any manner the Contractor's obligations to undertake any action which may be necessary to establish and maintain safe working conditions at the location where the works are being carried out.

Equipment Safety Inspections

Prior to start of works, the Contractor is required to inspect the equipment and machinery required in connection with the works including but not limited to cranes, bulldozers, trucks, tractors, rigs, dumpers, etc., to ensure that works will be performed under safe condition.

In addition, the Contractor shall maintain and perform continuous safety inspection throughout the works and shall promptly implement all recommendations made pursuant to the said inspection.

The Engineer shall have the right to conduct its own safety audit or inspection at worksite. The Contractor shall comply with all recommendations arising from such audit or inspection.

The Contractor shall ensure that all fuel powered and electrical equipment working in the vicinity of flammable vapors is equipped with proper ignition protective devices. The Contractor shall ensure that only permitted personnel by way of previous technical training and familiarization are allowed to operate and/or maintain equipment and machinery.

Personal Protective Equipment (PPE)

The Contractor shall at its own cost, supply its personnel and subcontractor's personnel required in connection with the works with adequate PPE and maintain enforcement on the use of such PPE.

The Contractor shall purchase PPE in accordance with the following specification- PPE STANDARDS & TECHNICAL SPECIFICATIONS.

1	Safety Glasses	Frame: Wide vision, clear plastic eye shield with side protection which can be worn over spectacles.			
		Lenses: Clear polycarbonate affording BS2092 Grade 2 impact protection			
		Marking: all eye shields shall be appropriately and distinctly stamped with the authentic trademarks of the Manufacturer's monogram and standards.			
		Accessories: Neck strap only			

		Certificate: Manufacture"s Certificate of compliance to standards.					
		ANSI Z 87.1-1979					
		ANSI ZZ 87.1-1979					
		AS 1337-1981					
		BS 2029, BS 1542, BS679,					
		DIN 4646/58211					
2	Safety Shoes for general use	Hazard control: Crush from heavy objects (steel toe), Cuts and Puncture, Slip (oil resistant sole), Trip & Fall and Electrocution.					
		ANSI Z 41.1-1967					
		AS 2210 EN345					
	For chemical use	Hazard control: Crush from heavy objects (steel toe), Slip (oil resistant sole), Trip & Fall and Chemical contact					
		BS 1870/3, DIN 4843					
3	Coverall	One-piece coverall, Long Sleeve.					
		Flame/fire retardant material Nomex III A (DuPont Product)					
		Weight: min 150 gm/m2					
		Colour: Dark Green					
4	Hand Protection	All types of gloves, cotton, leather or PVC conforming to BS 1651 are acceptable.					
	Cotton Glove	Knitted Cuffs, palm, thumb and forefinger with anti- slip, PVC Dots. Overall length 250mm					
	Leather Cotton Glove	Cotton drill knitted cuffs with chrome leather palm. Overall length 250mm					
	PVC Glove	PVC over knit cotton interlock standard weight and smooth surface. Length 400 mm.					

5	Hearing Protection	Adjustable all-purpose headbands BS 6344, ANSI S 3.19 Adjustable			
	Earmuff	BS 6344, ANSI S 3.19			
	Ear muff on helmet	Expandable Foam, Non -toxic and Nonirritant			
	Ear plug/insert	ANSI Z 24.22 ANSI s 3.19-74 BS 5108, ISO 4869			
6	Head Protection	Peak type, Chemical resistance complete with hot press branding adjustable headband, Clip and Elastic chin straps			
		Material: ABS (Acrylic Butadiene Styrene Added with Nitrile)			
		ANSI Z 89.2-71, ANSI Z 89.1-86 class B, AS 1808-81, BS 5240, DIN 4840			
7	Eye/face Protection	Goggles with hooded ventilation - 2 (face shield (9) in combination with safety glasses - 4, 5)			
	Chemical splash goggle	ANSI Z87.1-68			
	Face shield	Goggles or Safety glasses- 1,3, 4, 5 (for severe exposure face shield- 9)			
		ANSI Z 89.1			
	Welding goggles	Welding goggles with tinted lenses 6, 7, 8 (for severe exposure face shield – 9)			
		ANSI Z 87.1-68, ANSI Z 87.1-79			
8	Safety Harness / lifebelt	The harnesses shall be constructed of shock-absorbing material e.g. Webbing manufactured from synthetic fiber. Similar, safety lanyards shall also be of synthetic fibers e.g. Polyamide, nylon or polyester.			
		To reduce possible injuries to the users from decelerating forces, safety harnesses, the leg and shoulder load• carrying straps at least 38mm (1.5 inches) wide.			
		Each safety harness must be provided with one or more D-rings suitably positioned for attachment to a safety lanyard. They shall withstand a 5000 lb (2300 kg) force without breaking or cracking.			
		Buckles should be of a universal-friction type.			

		Harnesses with load-bearing single-insertion type buckles are not permitted.
		Snap hooks for safety lanyards shall be of the self- closing type and shall be designed so that disengagement of each of the latches requires a deliberate action.
		All harnesses and safety lanyards shall carry test certificates or certificates of compliance to the standards to which they are manufactured.
		Two types of safety harnesses are recommended, and they are classified according to their intended use:-
		Chest Harness - Class II
		Body Harness - Class III
		AS1891, BS1397, MS707, LS 954-lanyard
9	Personal Floatation Devices (PFD's)	It is intended as an aid to turn an unconscious person in the water from a face down position to a vertical arld slightly backward position which greatly increases the chance of survival.
	Life Jacket	Type 1 PFD USGC (US Coast Guard)
	Work Vest	It -is intended as an aid to floatation should the wearer fall into the water.
		Type V PFD USGC (US Coast Guard)
10	Breathing Apparatus	BS 4667, NIOSH
11	Self-contain Breathing Apparatus	NIOSH, ANSI, AS, BS
12	Other Respirator for protection from dust, vapors, etc.	BS 2091, NISOH, EN 149
13	Fire Fighting Suits	NFPA 1971,NBSIR 75, us OSHACFR 1010VOL45

Mechanical Equipment Operation

The Contractor shall upon arrival at the worksite, inspect all mechanical construction equipment that is to be utilized in the work.

The equipment will include but may not be limited to the following:

- Cranes
- Dozers
- Graders
- Rollers
- Excavators
- Forklifts
- Dumpers
- Semi-Trailers and Prime Movers
- Compressors
- Temporary Electrical Distribution Boards
- Scaffolding equipment
- Rigging equipment
- Man-cages/Personal Baskets
- Aerial Work Platforms
- Etc.

All equipment inspected that requires remedial work (or replacement) shall be carried out at the Contractor's cost.

All equipment inspected and accepted for use on the work shall be clearly identified by a tagging system.

Occupational Health

The Contractor shall ensure that all its employees and subcontractor employees engaged in the work are medically fit and healthy. Any medical diseases or disabilities which the Contractor may consider will not adversely influence the employee's ability to perform his role in the work, should be reported to the Engineer prior to start of the work.

The Contractor shall at .no cost to the Employer be responsible for the medical welfare of its own and subcontractor employees and shall take care of arrangements for medical attendance, treatment or hospitalization if and when necessary and will arrange suitable insurance coverage for such contingencies.

The Contractor shall at its own expense have a fully equipped first aid station on site and make arrangement for availability of an ambulance. This station will be manned during all working hours.

The Contractor shall ensure that its personnel and subcontractor's personnel shall maintain a high standard of hygiene in connection with the performance of the work.

The Contractor shall provide where necessary sufficient hygienic drinking fluids and toilet facilities to meet health regulations and all other legislated requirements.

Confined Space

The Contractor shall take precautions which include gas/oxygen tests, PPE requirement, respiratory equipment, isolation of connections to confined space, provide ventilation and making confine space free from fumes, place person on standby, ensure availability of rescue equipment and team.

The Contractor's SHO or supervisor shall ensure that all necessary precautions and protective measures are implemented.

The person(s) shall be certified medically fit before they are allowed to work in confined space.

Emergency Response Preparedness

The Contractor, at its own cost, shall ensure adequate provision for emergency response at site for all hazardous and risky works, which as a minimum, includes the following;

- fire fighting
- fire prevention
- accidents or incidents
- epidemic spread
- first aid medical facilities
- any other hazardous/risky activity identified during execution

The Contractor personnel shall be trained and competent in the use of firefighting equipment effectively.

The Contractor shall also ensure its first aiders are trained and competent to render such services effectively.

Tools and Equipment

The Contractor shall •ensure that all Contractor's machinery, tools and equipment, facilities, and other items associated with the works whether purchased or rented are maintained in a safe condition and to be operated by competent operators. Tools shall only be used for the job they were designed to perform. All guards must be fitted and shall • be-in-good •condition at all times. All grinding discs must be checked for correct size and speed prior to fitting. Electrically powered tools shall meet the hazardous zones requirement where applicable. All electric cables shall be industrial type. Use of domestic electric cables is prohibited. The Contractor shall repair or replace defective tools and equipment at its own cost. Appropriate personal protective equipment must be worn at all times when using any tool or equipment.

Compressed Gas Cylinders

The Contractor shall ensure that:

- Mineral and Industrial Gases Safety Rules, 2010 should be followed.
- Compressed gas cylinders are stored, transported or used shall be in an upright
 position and secured to some substantial object or structure by a chain or other
 suitable means capable of supporting the weight of the cylinder. This applies to all
 cylinders, whether empty or full.
- Cylinder valves shall be closed, and hoses depressurized when cylinders are not in use.
- Cylinders shall have protective valve caps in place while they are being transported/stored.
- Cylinders shall be returned promptly to a suitable storage area after use. They shall

not be left at any worksite. Cylinder storage areas should be kept away from general traffic paths and must not be adjacent to vehicle paths.

- Flammable gases and oxygen cylinders must not be stored in close proximity unless separated by a non-combustible wall.
- Cylinders may only be hoisted when enclosed in an approved box or cradle within which they are securely fastened.
- Cylinders must be identified by a colour code in accordance with Malaysian or respective national standards.
- Gas welding cylinders shall have hose check valve (non-return valves), which allow
 gases to the blowpipe, but not back from it. Flashback arrestors shall be installed to
 quench flashback flames and cut off the gas flow automatically, in both oxygen and
 fuel gas outlet lines.

Welding and Cutting

The Contractor shall ensure only competent, authorized workers be allowed to use welding equipment. Hard hats are not required to be worn by welders during actual process of welding if there is no immediate potential for head injury.

The Contractor shall ensure suitable precautions against exposure of welding hazards such as excessive ultraviolet radiation, fire, or dusts.

Welding, and/or flame cutting in the vicinity of flammable or combustible items shall only done under the control of qualified persons.

The Contractor shall provide adequate number of suitable fire extinguishers at a welding site. Welders must be competent in the use of these extinguishers.

The Contractor shall carried out all welding and cutting works following WB EHS General Guidelines, OHSA regulations, AWS/ASME/BS/CEN/ISO relevant standards.

Grit Blasting

The Contractor shall take permit prior to grit blasting. The Contractor shall provide the blaster with an approved air mask and oil free air supply. Associated workers and any other personnel within the blasting area must wear approved respiratory protection. The blasting gun must have a "dead man' safety device operated by the blaster. Under no circumstances the device be tied back.

The Contractor shall made efforts to minimize the exposure of the blasting grit to the surrounding environment. Protective shield shall be erected, and notice board shall be posted in order to prevent exposure of the blasting grit.

11.2.13Chemicals

The Contractor shall ensure all requirements for storage, handling and personal protection outlined in the material safety data sheet are followed.

Solvents, cleaners and cleaning agents must not be stored or used in unventilated areas or in immediate proximity to any sources of ignition. Quantities of such materials greater than needed for one day's work must be stored outside the work area in a proper

storage facility. Smoking is not permitted while using or in the vicinity of any such chemical.

Driving/Vehicle Safety

The Contractor's personnel travelling to and from worksite shall use proper means of transport. Such transport shall comply with the Pakistan Statutory Rules made under the Road Traffic. Transportation of personnel in open trucks is prohibited unless fitted with seats and certified to carry passengers. The Contractor shall be responsible to provide safe access and egress to the worksite. The Contractor shall set allowable speed limit and place suitable road signs at the worksite.

The Contractor shall maintain and enhance the awareness of safe driving among its employees and its subcontractors. This includes wearing of seat belt, observing speed limit, maintain good vehicle condition, driving defensively and possess valid driving license.

Electrical Safety/Power Source

No part of any lifting device or any equipment operated around power lines is closer than below:

150-750 V 2.0 m 750- 50k V 3.0m 50k-250k V 4.5m 250kV 6.0m

For High Tension Lines 9.0m

The above clearance applies in all directions. All overhead lines shall be identified with a highly visible sign placed 7m from both sides of the lines, 1.8m above ground. A restriction guard pole connected with ropes shall be installed 1o restrict clearance_ close to power lines.

It is mandatory to follow NEPRA Power Safety Code 2014 for all electrical works.

11.2.16Excavation

The Contractor shall ensure that all excavation works shall meet the following requirements as a minimum:

- Prior to embarking excavation work, proper design and plan shall be drawn up taking into account the soil type and the weather conditions and proximity to facilities.
- Walkways between trenches should be kept clear of obstruction.
- A competent person must inspect all excavations, shafts, tunnels and earthworks of any description each day when persons are working.
- A standby person shall be made available at all times equipped with all necessary safety equipment.

- All excavation exceeding 1.5 meters shall be shored. For excavation exceeding 2 meters deep, a confined space permit shall be secured.
- No mechanical excavation within 1 meter of the existing service is allowed. All underground services must be hand exposed and identified.
- All excavation operations should be carried out following WB EHS General Guidelines., ISO 93.02, ILO standards, OHSA standards.

Barricade, Platforms and Guardrails

The Contractor shall provide adequate barricades, covers, guardrails, signal flag persons or other appropriate warning devices to protect personnel near any hazardous operations or overhead work. Temporary covers for floor openings shall be firmly fastened and clearly identified by warning signs.

All elevated work areas, walkways, platforms etc. whether permanent or temporary, shall be protected by an approved guardrail (consisting of an upper and intermediate rail and toe board) and shall provide a sturdy working space. The Contractor shall provide all the necessary signs, barriers, flag persons, etc. to protect the general public from exposure to injury from the work.

11.2.18Scaffold

A safe means of access must be provided for any work to be carried out at a height greater than 2 meters above ground. If a suitable permanent access is not available, a well-designed, erected, inspected and maintained scaffold will provide a safe means of access and safe working areas. Additionally, safe access to scaffold work platforms by ladder must be provided. All scaffoldings shall be constructed in accordance with B.S 5973 Code of Practice for Access and Working Scaffolds and Special Scaffold Structures in Steel or its equivalent.

All scaffolding materials and components shall be as follows:

a. Scaffold tubes

All tubes must be galvanized steel 48.3mm OD and wall thickness 4mm comply to BS 1139 Part 1, 1982 and free from cracks, splits or excessive corrosion and straight. Black steel or aluminum scaffold not allowed in offshore.

b. Coupling and fittings

They must be of sound construction, comply with BS 1139, Part 2. Do not mix tubular and fittings of different standards.

c. Board or decking

All timber scaffold boards shall meet the international standards.

d. Ladders (If Applicable)

Ladders shall meet BS 1129:1982.

e. Frame or tubular scaffold

Only proprietary steel frame or tubular scaffold of sound design and construction are allowed as per manufacturer specification,

f. Inspection (If Applicable)

A scaffold inspector shall inspect all scaffold material. Any scaffold above 40 meters must be designed and endorsed by a professional structural and forward to DOSH.

g. Erection

Scaffolds must only be erected, altered or dismantled by competent scaffolder under supervision of a chargeh and scaffolder. All inspection of any scaffold shall be done by a scaffold inspector.

Camp Site

The Contractor shall construct and operate the camp in accordance to the following requirements:

- Air-condition rooms
- Electrical equipment and wiring to safety standard
- Smoking in bedrooms prohibited
- All fuel lines are properly connected
- Smoke detectors in rooms
- Fire extinguishers at strategic locations
- Evacuation procedures posted

11.2.20Office

The Contractor shall maintain comfortable working condition in office as follows:

- Temp 20-26 deg C
- Humidity 40-60%
- Adequate ventilation
- No smoking policy
- Photocopy placed away from personnel workstations
- Adequate lighting comfortable to the eyes at 400 lux
- Recommend white ceiling
- Colorful posters/picture on walls
- Office space at 6.25 sq. m per workstation
- Welfare facilities e.g. toilet, eating area
- Cleaning daily
- Clear passageways, remove tripping hazards
- Emergency plans for evacuation
- Ensure car park well-lit and control of vehicle movement
- Office chairs with 5 wheels and adjustable seat height and back rest

- Reduce VDU screen glare
- Frequent breaks for key board operator
- Gentle stretching exercise before work and after lunch
- Keep first aid box

11.2.21Storage/Warehouse

The Contractor shall ensure an acceptable means for storing of material, chemical and fuel on sites. The requirements for storing of materials shall also include the following:

- Construction material shall be stored at the designated on site location
- Written procedures on handling and disposal for all material must be made available
- Good housekeeping must be practiced at all storage sites
- Storage areas must be located away from vehicular traffic at areas
- Storage floors and bins shall be labeled and constructed to safely support the loads that are to be imposed upon them with a posted appropriate maximum safe load limits provided
- Storage buildings and warehouses must be provided with an approved lighting, well ventilated and constructed with a fire resistance or explosion proof facilities where appropriate for the chemicals or fuel stored.
- Welding, cutting or any other operations that create sparks must be prohibited inside a warehouse or near the flammable/combustible material storage yards
- Adequate number of fire extinguishers of appropriate type shall be made available at all storage areas and warehouses.
- All personnel shall wear approved hard hats while in storage areas.
- Flammable and combustible liquids shall be stored separately preferably in storage buildings.
- Storage rooms shall be constructed to meet the required fire-resistant rating for their use
- Approved safety cans/cabinets shall be used to store and transfer flammable and combustible liquids, with the name of the material clearly stamped
- "No Smoking" signs shall be posted at storage areas involving flammable and combustible liquids

11.2.22Explosives

The Contractor shall ensure that every reasonable precaution will be taken to ensure that Contractor's personnel dealing with the explosives observe recognized industry regulations in the correct transportation, storage and usage of explosives. Similar precautions must be exercised when dealing with other potentially hazardous sources e.g. flammable substances.

The Contractor shall obtain all relevant permits and comply with the regulatory requirements for the use of explosives.

11.2.23Transportation

Whether by land, sea or air, the Contractor is obliged to follow recognized industry guidelines for the safe transport of personnel and equipment.

11.2.24Lifting

All cranes supplied by the Contractor shall be tested before going into service and witnessed by the Engineer and a competent person. All associated lifting equipment shall be inspected.

The Contractor shall maintain cranes in a safe condition and make repair or replace unsafe crane for works. Should there be any doubt to the safety of the crane, the Contractor may be required to perform load test at the Contractor's cost.

A colour coding shall be used to identify inspected lifting appliance. The Contractor shall seek approval from the Engineer on any heavy lifting of 15 tons and above. The Contractor is responsible for ensuring that a competent, authorized worker operates any lifting device and that a signaler is designated to signal the operator as necessary to properly place and control the loads.

Prior to performing any lift, the operator shall determine the weight of the object being lifted and ensure that cables, lifting device and any slings, wire rope, chains etc used in the lift are of a sufficient strength to support the weight of the load.

No worker shall be allowed under the load. Tag lines must be used to guide and control the load where excessive movement is possible.

A competent worker shall inspect all wire rope, chains, and slings prior to performing any lift. Record of inspection shall be kept for the Engineer"s review. During winch or tow, all personnel must be clear of the 'whip area' of cable under tension.

All lifting operations must be carried out using OHSA, ISO and other international standards and regulations.

Heavy Machinery

All Contractor's vehicles on any worksite must have proper insurance, be in safe operating condition.

They must be operated by a competent, properly licensed operator. It shall be operated in a safe manner and a speed suited to the terrain and weather condition.

All cranes, stringing trucks, heavy and tracked equipment and machinery, welding rigs and all vehicles except passenger vehicles must be fitted with reverse alarms. Any vehicle with restricted vision shall not operate in the vicinity of workers, except under the direction of a designated worker who is in a position to see that the way is clear and safe.

11.2.26Security

The Contractor shall provide adequate number of security personnel and security measures to safeguard the worksite from any threat, damage or theft of properties. The Contractor' security personnel shall be equipped with communication equipment and

able to contact police and other emergency units as required.

The Contractor shall provide shelter, facilities and amenities to enable such functions or duties to be performed properly and to the satisfaction of safety officer.

Drugs and Alcohol

The use, sale, dispensing or possession of drugs, narcotics and alcoholic beverages is prohibited on the location and at any place where the work is performed.

The Contractor shall ensure that its personnel do not at any time, during the performance of the work, partake, brought onto the worksite, or be under the influence of any alcoholic liquor, drug or other intoxicating substance. This prohibition also covers all legal or prescription drug which may impair an employee's ability to perform his job safely. Employees who are caught using or in possession of drugs, on the job site shall be discharged. The Employer reserves the right to randomly require the Contractor's employee, to undergo drug test at any time. Drugs test may be used in the event of accident investigation. The Contractor undertakes that each and every person engaged by it or on its behalf to perform any element of the work (including Sub-Contractor) shall be advised of the local laws relating to the importation and/ or possession of drugs.

Statistics Board

The Contractor is required to install a Loss Production Scoreboard to highlight achievement/milestone for safe working hours of employees.

The Contractor shall install the above at each site office. The Loss Production Scoreboard shall be of acceptable material and shall contain the following information as a minimum (in English and Urdu):

Name of CONTRACTOR	
Date Start of Work.	
Safety Target without LTA (Man-hours, Year)	
Best Record Achieved (Man-hours, Year)	
Current Man-hours Achieved (Man-hours, Year)	_
Date of Last Loss Time Accident	
Total Number of Loss Time Accidents	

All lettering in the Safety Scoreboard shall be of suitable sizes and shall be visible from at least 10 meters distance.

Safety Induction

The Contractor shall implement a safety induction for the site. The Contractor shall identify its employees who will be required to attend the safety induction program. The induction briefing shall be applicable to all employees and sub• contractor's employees. The participation of all staff is mandatory.

Briefing shall be done at site prior to the commencing of the construction activities.

Each worker who has attended and completed the safety induction program shall be issued with a sticker to indicate that he has completed the safety induction course. The sticker shall be displayed on the safety hat and worn at site.

Toolbox HSE Meeting

The Contractor shall ensure that his appointed works supervisor hold 'toolbox' safety meeting for about 5-10 minutes daily or prior to each shift. Specific topics shall include hazards relevant to current work, review of accidents and near misses and deficiencies and any new equipment or machinery. The Contractor shall maintain records of attendance and submit to the Engineer as and when required.

HSE Meetings

The Contractor shall form a Safety Committee at work site and shall hold regular meetings, minimum monthly to create and maintain an active interest in safety. The meeting shall be attended by the Contractor management and workers representatives and chaired by the Engineer or his representative. Minutes of meeting shall be distributed to all attendees.

Working at Height

When working at height more than 7.5 meters, the Contractor shall provide suitable safety nets, which extends 2.5 meters beyond the edge of work level. The nets shall be sufficiently anchored using steel hooks or shackle. The net shall be inspected daily.

If nets are impractical, the Contractor shall provide to the workers fall protection devices such as belts, harness etc. Fall protection is required when working above 3 meters. Personnel using fall protection shall be instructed on its use.

All works carried out at height should comply with European Directives/BS/OHSA/ILO/ISO standards, regulations and directives

Air hose

Air hose should not be used to clean any part of the body or clothing or use to blow off dirt on the floor.

Safety Inspection/Audits

Prior to commencement of works, the Contractor is required to inspect the worksite and equipment involved to ensure that works will be performed under safe conditions. In addition, the Contractor shall maintain and perform continuous safety inspection throughout the works and shall promptly implement all recommendations made pursuant to the said inspection. The Employer/ Engineer shall have the right to conduct its own safety audit/Inspection at the worksite. The Contractor shall comply with all recommendations arising from such audit/Inspection.

Safety Performance Target

The Contractor shall implement and establish a safety management award program to recognize the achievement and milestone for safe working performance for its employees.

Abrasive Wheels

The Contractor shall ensure that safety protection in the form of goggles and /or shields are provided and utilized by the personnel working with grinding machines and abrasive wheels. When changing discs on a portable grinder it is imperative that a suitable replacement disc is fitted and placed in the correct manner. The Contractor shall ensure only trained and competent personnel are Permitted to carry out this task.

Contractor HSE Performance Reports

The Contractor shall · compile and maintain HSE performance records pertaining to its work. These records shall be updated and submitted to the Engineer's representative monthly or as and when required.

Contractor Training Records

The Contractor shall provide adequate training to all its personnel to ensure that they have sufficient knowledge and skill to undertake assigned tasks. The Contractor's training records shall be maintained and controlled.

Job Safety Analysis (JSA)

Prior to performance of works, the Contractor shall implement JSA as a safety precaution to eliminate or guard against hazards on a specified job. The JSA methodology shall include the following:

- Study the job and develop basic job steps
- Identify the hazards on each job step
- Identify the safety precautions to be taken against each job step
- Record the JSA and inform all workers of the hazards and precautions to be taken.

Incident Notifications and Investigation

The Contractor shall develop an accident/incident reporting system. Any hazardous incident involving the Employer, the Engineer, the Contractor's or any third-party personnel, plant or equipment, shall be immediately reported to the Engineer, irrespective of whether there is injury to personnel or damage to plant or equipment.

All incidents that result in or have the potential to cause serious injuries or property damage must be suitably investigated by the Contractor and reported to the Engineer. The Contractor shall keep a copy of the report at site. The Contractor is required to investigate and report major accident to the concerned government department in accordance with the regulatory requirements. The investigation and report shall not preclude any similar investigations and reports required by the governmental authority in accordance with any relevant laws and regulations and maybe handled concurrently with them.

Upon completion of the work under the contract and/or on an annual basis, whichever is more frequent, the Contractor shall prepare a summary report of its HSE performance together with an accident statistic.

The Employer and the Engineer should be notified by the Contractor of any incident/accident as per Clause 4.8 of the Conditions of Contract.

Use of Public Road

The Contractor shall keep public roads free from its debris due to vehicle movement to and from site. The Contractor shall provide washing facilities at site to clean vehicle tyres. In the event of spillage onto the road, the Contractor shall undertake the cleaning at its own cost.

11.3 MEASUREMENT AND PAYMENT

The work under this SP-11 (Health & Safety) shall neither be measured nor be paid separately. The cost incurred in this respect shall be deemed to have been included in other items of work.

In case of failure of the contractor to comply with all or any provision(s) of this SP-11, the damage(s) caused shall be attributable towards the Contractor, and the Engineer shall assess the amount of such damage(s) which shall be deducted from the monies due or to become due to the Contractor.

ESMP for this scheme prepared by the Employer are attached in Technical Specifications.



KARACHI DEVELOPMENT AUTHORITY ENGINEERING DEPARTMENT

(SINGLE STAGE ONE ENVELOPE MEIHOD)

Based on SPP Rule 2010 (Amended 2013)

NAMEOFSCHEME:

CONSTRUCTION / REHABILITATION	ON OF ROAD FROM 4-K
CHOWRANGI NORTH <u>K</u> ARACHI T	O GULSHAN-E-MAYMAR
YOUSUF	GOTH,
KARACHI	
<u>A</u> DP # 2314/202	2-23
Estimated Cost: Rs. 439.157 (Million)	Time Limit: Months
Bid Security: - Rs. 5 % of Bid	Penalty: 5000/- Per Day
Tend.erCost·-Rs 1	Validity of Tender:90 Days <u>cExtend.ablefm</u>
NOTE:	
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Amount _

Dated:____

Bank:

CONSTRUCTION / REHABILITATION OF ROAD FROM 4-K CHOWRANGI NORTH KARACHI TO GULSHAH-EMAYMAR YOUSUF GOTH DISTRICT WEST KARACHI.

			AMOUNT		
SPEC. No.	Spec. Descritption	Unit	Estimated Quantity	Rate	Amount (Rs.)
	BILL NO.1: CARRIAGEWAY				
	SCHEDULE ITEMS				
1	Clearing and Grabbing the site by cutting, uprooting and removing all				
	rabbish shrubs including disposal to designated places (Vol-III (Highways)	Sqm	500	10.44	5,22
	Chap-1, Pg-1, Sr. 1)	- 4			
2	Cutting & Removing trees within a distance of 100 feet.				
	upto 2.5 feet grith.	Each	10	535.43	5,35
	upto 2.6 to 6 feet grith.	Each	10	1,043.63	10,43
	(Vol-HI Part m, (General) Chap-18, Pg-95, Sr. 2)			,	,
3	Dismantling and Removing Road Metaling' Vol-m, Part-n, Chip-2, Pg-13, Sr.	_			
	51)	Cum	120	213.68	25,64
	Preparation of Sub Grade including earth excavation or filling to an average				
4	depth `of 9" dressing to camber and consolidation with power roller (Vol-HI	sqm	60,000.00	56.66	3,399,60
	(Highway*) Chap-2, Pg-2, Sr. 9)	34	00,000.00	30.00	3,333,60
	Cartage of excavated material earth wor!< wet silt building material rubbish				
5	muoum earth including loading and unloading lead upto 7 miles.				
	1ST Mile	cum		143.75	
	2nd Mile	cum		177.49	
	3rd Mile	cum		204.65	
	4th Mile	cum		229.53	
	5th Mile	cum		252.29	
	6th Mile	cum	1,080.00	272.66	294,4
	After 7th Mile and every Sub-s xjuent Miles upto 15 Miles (Maximum)	cum	1,080.00	103.50	111,7
	(Vol-I, Part-I, Cbap-1, Pg-I/Sr. 1)	cam	1,000.00	103.30	111,7
	Eanh work excavation ofroad side nalies including forming its banks or				
	putting iho same on embankment as directed clod breaking dressing tic,				
_	complete (throw work) (In ordinary soil) & Earth work compaction, (soft				
6	ordinary or hard soil), b) Laying earth in 6" layers levelling & dressing &	cum	480.00	63.22	30,3
	watering for compaction etc, complete.				
	Vol-m (Highways) Chnp-2, Pg-1, Sr. 4 & Pg 2, Sr. 9) .				
	Earth work embamkment from borrow pits including laying in 6" layers, clod				
7	breaking ramming dressing complete, lead uptoJOOit: lift upto 5 ft:	cum	480.00	78.00	37,44
	(Inordinary soil)Vol-III (Highways) Chap-1 Pg-4, Sr. 5)	- Cu	400.00	70.00	37,4
	preparing Sub-Base by supplying and spreading well graded pit or bed ran				
	gravel having a liquid limit not greater than 25 and plasticity index not				
	greater than 6 in proper camber and grade including watering rolling and				
8	compacting in layen, uclmess of each compacted layer not exceeding 6"	cum	14,655.00	1,180.82	17,304,9
	compacted upto 98-100% ensity as per modified AASHO density (Rate i/c all		2 1,055100	1,100.02	17,55 1,5
	cost of materials T&P and image upto 3 chains). Vol-III (Highways) Chnp-2,				
	Pg-4, Sr. 11d)				
	Providing and Laying Aggregate base course in proper grade and camber				
	having CBR 30% as per AASHTO standard specifications i/c spreading and				
	compacting by approved mechanical means (Motor grader, Vibratory roller				
9	and Smooth wheel roller etc) watering to maintain the moisture content the	cum	19,540.00	1,958.39	38,266,9
	compaction of eacl layer -hall 100 percent to the max dry density (Rate i/c all		.,.	,	, , .
	cost of materials T&P and carriage upto 3 chains). (Vol-III (Highways) Chap-2,				
	Pg-5, Sr. I3b)				
	Asphalt Concrete base Conne Providing and laying Plant mixed Asphalt				
	Concrete Binder Course compacted thickness 3"inches (75mm thick) as per				
	approved job mix formula using crush aggregate ftom approved source.				
	Using asphalt of grade 60/70 during laying temperature not less than 140C				
	compacted by steel wheel & PTR roller. The procedure of laying binder				
10	course material & methodology shall fully comply with AASHTO and as	cum	7,327.50	15,449.07	113,203,0
	directed by Engineer Incharge. Minimum bitumen content should be 3.5%	cuiii	7,327.30	13,743.07	113,203,0
	binder course shall be spreading, using paver machine, Rolling & Finishing to				
	design proper grade line level and camber etc. (Machinery with POLs cost of				
	material carriage). (Vol-III (Highways) Pg-'IO, Sr. 23A)				
	indection contrage). (vot in (ingliways) i g-10, 51. 25A)				1

CONSTRUCTION / REHABILITATION OF ROAD FROM 4-K CHOWRANGI NORTH KARACHI TO GULSHAH-EMAYMAR YOUSUF GOTH DISTRICT WEST KARACHI.

	Spec. Descritption	Unit	AMOUNT		
SPEC. No.			Estimated Quantity	Rate	Amount (Rs.)
11	Providing and Laying Asphalt Concrete Wearing Coiirue Plant Mix) Laying to proper lice and grade plant mixed Asphalt concrete paver finished Hydraulic Electronic Control) prepared to specified formula according to job nix formula approved by Engineer incharge includig rolling and finishing to 'toperiine, grade level and camber etc: (Machinery with POLs material arriage) Vol-III (Highways) Pg-9, Le. 24b)	cum	5,827.50	17,804.60	103,756,307
	Taking diagonal grooves of 1-1/2" * 1-1/2" at 2 Ff: centre to centre in road Surface. Vol-m (Highways) Pg-15, Sr. 7)	sqm	800.00	15.74	12,592
	BILL NO.01 CARRIAGEWAY (SCHEDULE ITEMS).				276,464,103
				Continu	ed on next page

	QUOTED SUMMARY				
	I / We hereby qoute as follows:				
l		In Figures	In Words		
l .	Bill No. 01 (Item Based on S/R) amounting Rs. 276,464,103/= @ % Above /				
1	Below on Item Schedule Items.				
	GRAND TOTAL				

<u>KARACHI DEVELOPMENT AUTHORITY</u> NAME OF WORK :CONSTRUCTION / REHABILITATION OF ROAD FROM 4-K CHOWRANGI NORTH KARACHI TO GULSHAH-E- MAYMAR YOUSUF GOTH DISTRICT WEST KARACHI.

	Spec. Description			AMOUNT	
SR. #		Unit	Estimated Quantity	Rate	Amount (Rs.)
	BILL NO 2: MEDIAN, FOOTPATH, ISLAND				
	SHEDULE ITEM				
1	Dismantling of cement concrete plain (Ratio 1:2:4) Vol-m, Part-II, Chap-II, Pg- 10, Sr. 19c (General)	СИМ	67.50	1,174.170	79,256.00
2	Providing & fixing Precast Edge Block 3750 PSI Industrial Made Size 6 inch thick x 12 Inches long x 18 Inches high including the cost of Cartage excavation, form Work for hunching, 1450 PSI lean concrete, 2250 PSI concret for haunching, 1:4 cement sand mortar. (Vol-III (Highways) Chap-39, Pg-15, Sr. 14c)	M	10,000.00	974.190	9,741,900.00
3	Earth work excavation of road side nalies including forming its bauks or putting the same on embankment as directed clod breaking dressing etc, complete (throw work) (In ordinary soil) & Earth work compaction, (soft ordinary or hard soil) (b) Laying earth in 6" layers levelling & dressing & watering for compaction etc complete (VoL-III (Highways) Chap-2, Pg-1, Sr. 4 & Pg-2, Sr. 9)	CUM	210.00	63.220	13,276.00
4	Re filling the excavated stuff in trenches 6" tliick layer i/c watering ramming to full compaction etc complete Vol-IV, Part-VT, Chap-H, Pg-77, Sr. 24 (PHW)	CUM	6,000.00	97.460	584,760.00
5	Certage of excavated material earth work wet silt building material rubbish murrum earth including loading and unloading lecd upto 7 miles				-
	1st Mile	CUM		143.750	
	2nd Mile	CUM		177.490	-
	3rd Mile	CUM		204.650	-
	4th Mile	CUM		229.530	-
	5th Mile	CUM		252.290	-
	6th Mile	CUM	277.50	272.660	75,663.00
	After 7th Mile and every Sub-sequent Miles upto 15 Miles (Maximum) . Vol-i Part-I, Chap-1, Pg-1, Sr. 1)	СИМ	277.50	103.500	28,721.00
6	Cement concrete tiles laid flat in 1:2 cement mortar over 3/4" thick bed of cement mortar 1:2. 11^15/16 x 11^15/16" x1 Vol-III, Part-II, Chap-8, Pg-41, Sr. 14a)	SQM	0.00	564.660	-
7	Providing & fixing cement paving blocks flooring having size of 197 x97x60 (mm) of city / quddra/ cobble shape with natural colours having strength b/w 5000psi to 8500 psi i/c filling the joints with hill sand and laying in specified manner/ pattern and design etc completed Vol-III, Part-II, Chap-8, \Pg-49, Sr. 71)		9,600.00	2,149.520	20,635,392.00
	BILL NO 2: MEDIAN	, FOOTPATH, IS	SLAND (SCHEDULE ITEMS)		31,158,968.00
	NON SHEDULE ITEM				
	Providing and fixing precast edge block 3750 pSI individual maid size 6 inches x 12 inches long x 12 inches height including the cost of cartage excavation from work for hunting 1450 psi in concrete 2250 PSI concrete for hunching for cement and motar	М	600.00		
	BILL NO	O.02 DRAINAGI	(NON SCHEDULE ITEMS).		
	TOTA	L OF SCHEDULE	& NON SCHEDULE ITEMS		
	QUOTED SUMMARY				
	I / We hereby goute as follows:				
	Bill No. 02 (Item Based on S/R) amounting Rs. 31,158,968/= @ % Above /		In Figures	In Words]
1	Below on Item Schedule Items.				
2	BILL NO. 02 (Item Based on N/S/R)				
	GRAND TOTAL				

NAME OF WORK :CONSTRUCTION / REHABILITATION OF ROAD FROM 4-K CHOWRANGI NORTH KARACHI TO GULSHAH-E- MAYMAR YOUSUF GOTH DISTRICT WEST KARACHI.

				AMOUNT	
SR.#	Spec. Description	Unit	Estimated Quantity	Rate	Amount (Rs.)
	BILL NO 3: ANCILLARY WORK				
	SHEDULE ITEM				
1	Providing and laying fair faced reinforced cement concrete new jersey barrie having 3000 PSI compressive cylindrical strength Concrete (Ready mixa concrete) (area 1.5 Sft) as per drawing including the cost of excavation formwork, lean concrete 1450 PSI compressive cylindrical strength etc. complet in oil respect. (Excluding the cost steel reinforcement). (Vol-III (Highways) Pg-15, Sr. 17)	RUN	120.00	1,721.440	206,572.80
2	Providing & fixing traffic sign 3" dia GJ. Pipe post and sign of equilateral triangular shape each side 3' long i/c Painting, Marking as directed each. (Vol-III (HIghway) Chap-39, Pg-16, Sr. 18-a)	NOS	15.00	14,600.000	219,000.00
3	Providing & fixing traffic sign 3" dia G.I. Pipe post and sign of equilatera circular shape each side 3' long i/c Painting, Marking as directed each. (Vol-m (Highways) Pg-16, Sr. 18-b)	NOS	12.00	14,600.000	175,200.00
4	Providing & Fixing Rectangular shape 3' x 2" comprizing 2 Nos: 3" Dia G.I pipe Post i/c Painting, writing as directed each. (VoI-DI (Highways) Pg. 1C, Sr. 18-c)	NOS	15.00	16,765.000	251,475.00
5	Proriding & Fixing Infonnatory Sign Rectangular shape 4' x 3" comprising 2 Nos: 3" Dia G.I pipe Post i/c Painting, writing as directed each.(Vol-m (Highways) Pg-16,' Sr. 18-chlQ	NOS	10.00	16,956.000	169,560.00
6	Pavement marking in reflective Paint for lines 150mm width or ns per drawing aad as per direction by the Engineer Incharge Vol-III,Part VI (Highways) Pg-li, Sr. 13)	М	12,500.00	135.310	1,691,375.00
7	supplying and fixing of reflectorize road studs double face flush surface type Vol-III, Part VI (Highways) Pg-15, Sr. 12)	EACH	5,000.00	596.230	2,981,150.00
8	Painting with enamel paint on mnsonary wslls, kerb & gutter etc.	SQM	4,500.00	837.100	3,766,950.00
	BILL NO 3:	ANCILLARY WC	ORK (SCHEDULE ITEMS)	•	9,461,283

	QUOTED SUMMARY				
	I / We hereby qoute as follows:				
			In Figures	In Words	
	Bill No. 03 (Item Based on S/R) amounting Rs. 9,461,283/= @ % Above /				•
1	Below on Item Schedule Items.				
GRAND TOTAL					

NAME OF WORK : CONSTRUCTION / REHABILITATION OF ROAD FROM 4-K CHOWRANGI NORTH KARACHI TO GULSHAH-E- MAYMAR YOUSUF GOTH DISTRICT WEST KARACHI.

			AMOUNT			
SR. #	Spec. Description	Unit	Estimated Quantity	Rate	Amount (Rs.)	
	BILL NO 4: SEWERAGE WORKS					
	SHEDULE ITEM					
1	Dismantling and removing road metaling. (Vol-III, Part-II, Chap-2, Pg-13, Sr. 511)	CUM	472.50	213.690	100,969	
2	Excavation for pipe line in trenches, and pits in all kind of soils of munun i/c trimming and dressing sides to true alignment and shape leveling of beds of trenches to correct level and grade, cutting joint holes and disposal of surplus earth within a one chain as directed by Engineer Incharge. Providing fence guards lights, flags and temporary crossings for non-vehicular traffic where ever required lift upto 5 ft.(1.52m) and lead upto one chain (30.5m)				-	
	Lift O' - 5"	CUM	7,087.50	164.240	1,164,051	
	Lift 5'-8"	CUM	225.00	183.660	41,324	
	Lift 8' - 11"	CUM		203.090	-	
	Lift 11'-14"	CUM		222.520	-	
	(Vol-III, Part-III, Chap-iii A, Pg-62, Sr.5)				-	
3	Construction manhole for the required dia of circular sewer end 7'-9" depth with walls of B.B in cement mortor 1:3 cement plastered 1:3 1/2" thick inside of walls and 1" (25mm) thick over benching end channels i/c fixing C.I manhole cover with frame of clear opening 2'x2' (610x610 mm) of 4.5 cwt embaded in plain C.C 1:2:4 and two way reinforced 6" thickness i/c fixing 1" (25mm) dia Ms steps 6" (150 mm) C/C duly painted etc complete as per standard specification and drawings.	EACH	100.00	45,049.000	4,504,900	
	b) 12" dia. 4'-6" s 3'x7'-9"				-	
	(Vol-III, Part-III, Chap-iii A, Pg-47, Sr.2b)				-	
4	full hire charges of the pumping set per day i/c of wage3 of driver and Assistant uel or electric energy plate forms required for placing pumps etc. at lower depth vith section and deliver pipe for pumping out water fond at various depth from enches i/c the cost of erection and dismantling after completion of the job. Hire larges of pumping set up to 10 HP pluming out water from 10 ft. deep trench.	P/DAY	30.00	1,500.000	45,000	
	Vol-III, Part-III, Chap-III A, Pg-76, Sr. 23)				-	
5	PROVIDING LAYING RCC PIPES WITH (RUBBER RING JOINT				-	
	200 mm (8" dia)	M		675.890	-	
	300 mm (12" dia)	M	200.00	1,204.130	240,826	
	375 mm (15" dia)	M	200.00	1,430.520	286,104	
	450 mm (18" dia)	M	2,500.00	1,768.460	4,421,150	
	600 mm (24" dia)	M	200.00	2,591.990	518,398	
	910 mm (36" dia)	М	50.00	4,813.230	240,662	
6	Vol-III, Part-III, Chap-II A, Pg-18, Sr.B-2) Manufacturing and supplying of 21 inch diameter RCC Manholo Covers cast in 1:2:4 cement concrete ratio 3", Deep at center rain-forced with Vi' dia M.S. tor bars with 4" dc welded to a 3/16" thick 2" wide M.S. Flat and tow hook of 3/8" dia tor bars including compacting, curing and transportation within 10 miles etc.				-	
	21" dia.	EACH	100.00	913.630	91,363	
	24" DIA	EACH	100.00	1,025.250	102,525	
7	Vol-III, Part-III, Chap-II A, Pg-54, Sr.A1-B) Manufacturing & supplying of RCC ring slab 21" dia (inside) and 36" dia outside 7.5 width and 6" thick i/c 3/8" dia tor steel bars two concentric rings with 3/8" dia 3 Nos cross linked bars welded and two sunk type hooks, casted in 1:1 H:3 concrete with embedded 15 kg C.I frame in perfect position i/c transportation charges for on average lead of 2 km per trip from casting yards to town offices (A minimum of 25 slabs per uip will bn transported) Vol-III, Part-III, Chap-II A, Pg-54, Sr.A1-B)	EACH	100.00	1,906.600	190,660	

NAME OF WORK : CONSTRUCTION / REHABILITATION OF ROAD FROM 4-K CHOWRANGI NORTH KARACHI TO GULSHAH-E- MAYMAR YOUSUF GOTH DISTRICT WEST KARACHI.

	ABSTRACTOR		AMOUNT		
SR. #	Spec. Description	Unit	Estimated Quantity	Rate	Amount (Rs.)
	Making connection with the existing manhole i/c the cost of cutting hole in				
8	wall, making them good in C.C 1:2:4 and making required channel etc. complete	EACH	30.00	180.000	5,400
	Shifting to the site and fixing 36" dia ring slab in perfect position on damaged				
9	manhole i/c cutting of the position of damaged manhole in proper shape	EACH	100.00	563.090	56,309
9	lying in layer of C.M in 2" thickness and disposal of the debris.	LACIT	100.00	303.030	30,309
10	Refilling the excavated stuff in trenches 6" thick layer i/c watering ramming	CUM	7,087.50	97.480	690,890
	to full compaction etc. complete		7,007.50	371.00	030,030
	Cleaning inside sewerage line completely restoring original silt free space				
	diameter of pipe line bylabour and quipment. (mechanically/electrically driven) i/c accessories like pully's steel rope, bucket and draggers sizing 6" ti				
	18" dia.Their "to and fro" pulling action (No of passes shall be as many as				
	required) would be taken in tow phases (First Phase entire lenght from from				
	downstream to upstream bringing down peak hourse sewerage to flow				
	inside pipe line (as free flow) and in second phase from up stream to down				
	stream of entire lenght no silt is observed in buckets (6" dia to 18" dia)				
	except only sewage water and finally passing a steel ball of dia 12" lesser				
11	that the diameter of pipe but not exceeding 48" dia ball even for largeer dia				-
	pipe to ensure perfect cleaning. The job includes all the hire/cost of				
	equipment and accessories of above winching machine /devise along with engines with winching drum set having, steel rope pully mounted over it,				
	steel bucket fro 6" to 18" dia hocks and other protection like safety barriers,				
	traffic signs, traffic cones ensuring no damage to pipe line along with				
	ensuring safety to labor and other public property/lives and removal of silt				
	/solids during the desilting and clearance of site etc. complete as per				
	satisfaction of site engineer.				
	12" DIA	М	100.00	264.120	26,412
	18" DIA	M	100.00	422.590	42,259
	24" DIA 30" DIA	M	100.00	686.710	68,671
	33" DIA	M M		845.190 898.010	-
	36" DIA	M		950.830	-
	Cartage of excavated material earth work wet silt building material rubbish				
12	murrum earth including loading and unloading lead upto 7 miles				-
	1st Mile	CUM		143.750	-
	2nd Mile	CUM		177.490	-
	3rd Mile	CUM		204.530	-
	4th Mile	CUM		229.530	-
	5th Mile	CUM		252.290	-
	6th Mile	CUM	7,785.00	272.660	2,122,629
	After 7th Mile and every Sub-sequent Miles upto 15 Miles (Maximum)	CUM	7,785.00	103.500	805,748
13	C.I. Frame.	/KG	60.00	122.330	7,340
		SEWERAGE \	WORKS (SCHEDULE ITEMS)		15,773,588.00
SP-05	NON SHEDULE ITEM Granular material in bed to concrete pipe culvert etc complete in all respect.	CUM	3,150.00		
	BILL NO 4: SEWI	ERAGE WORK	(S (NON SCHEDULE ITEMS)		
	TOTAL OF BILL NO.04 (SCHE	DULE ITEMS)	& (NON SCHEDULE ITEMS)		

NAME OF WORK : CONSTRUCTION / REHABILITATION OF ROAD FROM 4-K CHOWRANGI NORTH KARACHI TO GULSHAH-E- MAYMAR YOUSUF GOTH DISTRICT WEST KARACHI.

	Spec. Description	Unit	AMOUNT			
SR. #			Estimated Quantity	Rate	Amount (Rs.)	
	QUOTED SUMMARY					
	I / We hereby qoute as follows:				_	
	Bill No. 04 (Item Based on S/R) amounting Rs. 15,773,588/= @ % Above /		In Figures	In Words	_	
1	Below on Item Schedule Items.					
2	BILL NO. 04 (Item Based on N/S/R)					
	GRAND TOTAL					

 $NAME\ OF\ WORK: CONSTRUCTION/REHABILITATION\ OF\ ROAD\ FROM\ 4-K\ CHOWRANGI\ NORTH\ KARACHI\ TO\ GULSHAH-E-MAYMAR\ YOUSUF\ GOTH\ DISTRICT\ WEST\ KARACHI.$

				AMOUNT	
SR.#	Description	Unit			
			Estimated Quantity	Rate	Amount (Rs.)
	BILL NO 5: WATER SUPPLY				
1	SHEDULE ITEM Dismontiling and remaying road metaling	CUM	75.00	212.60	16.027
2	Dismantiling and removing road metaling. Excavation for pipe line in trenches, and pits in all kind of soils of murum i/c	COIVI	75.00	213.69	16,027
2	trimming and dressing sides to true alignment and shape leveling of beds of trenches to correct level and grade, cutting joint holes and disposal of surplus earth within a one chain as directed by Engineer Incharge. Providing fence guards, lights, flags and temporary crossings for non-vehicular traffic where ever required lift upto 5 ft.(1.52m) and lead upto one chain (30.5m) Lift 0 '- 5'	CUM	750.00	164.24	123,180
3	Cartage of excavated material earth work wet silt building material rubbish				
	murrum earth including loading and unloading lead upto 7 miles				
	1st Mile	CUM	-	143.75	0
	2nd Mile	CUM	-	177.49	0
	3rd Mile	CUM	-	204.65	0
	4th Mile	CUM	-	229.53	0
	5th Mile	CUM	-	252.29	0
	6th Mile	CUM	825.00	272.66	224,941
	After 7th Mile and every Sub-sequent Miles upto 15 Miles (Maximum)	CUM	825.00	103.50	85,388
4	Providing laying & fixing in trench including fitting joining & testing etc complete in all respect the high density polythene PE pipes (HDPE-100) for W/S confirming ISO 4427/Din8074/8075 B.S 3580 & PSI 3051. PN-10				0
	110 MM	RM	150.00	879.31	131,897
	160 MM	RM	150.00	1,738.93	260,840
	200 MM	RM	150.00	2,733.07	409,961
	250 MM	RM	150.00	4,157.03	623,555
	315 MM	RM	150.00	6,555.44	983,316
5	Full hire charges of the pumping set per day inclusive of wage of driver and assistant fuel or electric energy plate forms required for placing pumps etc. at lower depth with suction and delivery pipes for pumping out water found at various depths from trenches including the cost of erection and dismantling after completion of the job. Hire charges of pumping set out water from 10 deep trenches. Fixing of sluice valves with 2cast iron tailpieces one end flanged and other with	P/DAY	15.00	1,500.00	22,500
6	socked including the cost of nuts bolts and rubber packing, labor etc. complete				
	12" dia.	EACH	15.00	3,281.00	49,215
	10" dia.	EACH	15.00	3,319.00	49,785
		EACH	25.00	2,790.00	69,750
		EACH	32.00	1,886.00	60,352
		EACH	15.00	1,532.00	22,980
				Contir	ued on next page
7	Construction of C.C Block masonry chamber of size 4'x4'x4' (inside dimension) with 24"x24" C.I cover from with 50 kg fixed R.C 1:2:4 flooring ½" dia for bars@ 6" C.C with chamber sent up both way distribution bar 6" C.C 1:4:8 in foundation 2" thick c.c 1:2:4 flooring ½" thick cement plaster 1:3 ratio inside wall surface 1 feet deep up to roof slab M.S foot rest 5/8" bars at every 2foot deep 1/c curing dewatering excavation refilling and disposal of surplus earth complete 4'x4'x4'.	EACH	20.00	28,357.00	567,140
8	Refilling the excavated stuff in trenches 6" thick layer including watering ramming to full compaction etc. complete.	CUM	1,050.00	97.48	102,354

 $NAME\ OF\ WORK: CONSTRUCTION/REHABILITATION\ OF\ ROAD\ FROM\ 4-K\ CHOWRANGI\ NORTH\ KARACHI\ TO\ GULSHAH-E-MAYMAR\ YOUSUF\ GOTH\ DISTRICT\ WEST\ KARACHI.$

				AMOUNT	
SR. #	Description	Unit			
			Estimated Quantity	Rate	Amount (Rs.)
9	Manufacturing, Supplying & fixing balck steel M.S pipe made out of M.S sheet confirming to API 5L grade X- 42 Spirally Welded & Externally asphalt coated with fiber glass 5mm thick (3 layers) & Internaly C.C linning 8mm thick (AWWA specification) i/c laying jointing with Hilical welding in trenches i/c cost of bends of any degree & testing with water specified pressure for different dia of pipes as below:(Spirally welded)				
	5.6mm thick (Dia 12")	RM	12.00	9,199.07	110,389
	6.4mm thick (Dia 18")	RM	12.00	14,728.93	176,747
	7.1mm thick (Dia 24")	RM	12.00	21,442.32	257,308
	9.5mm thick (Dia 36")	RM	12.00	41,416.72	497,001
	BILL NO 5: WATER SUPI	PLY WORKS (SCHEDULE ITEMS).		4,844,623
	NON SHEDULE ITEM				
	Providing C.I sluice valve heavy Pattern (Test Pressure 21.0kg/sq. com or 300 lb/sq:inch) (imported)				
	12" dia.	EACH	3.00		
	10" dia.	EACH	3.00		
		EACH	3.00		
		EACH	3.00		
	04" dia	EACH	1.00		
	BILL NO 5: WATER SUPPLY W	ORKS (NON-	SCHEDULE ITEMS).		
	BILL NO 5: WATER SUPPLY WORKS (SCHEDULE ITE	EMS & NON-	SCHEDULE ITEMS).		

	QUOTED SUMMARY		
	I / We hereby qoute as follows:		
		In Figures In W	ords
1	Bill No. 05 (Item Based on S/R) amounting Rs. 4,844,623/= @ % Above / Below on	•	
1	Item Schedule Items.		
2			
-	BILL NO. 05 (Item Based on N/S/R)		
	GRAND TOTAL		

KARACHI DEVELOPMENT AUTHORITY <u>ENGINEERING DEPARTMENT</u>

NAME OF WORK: 'CONSTRUCTION / REHABILITATION OF ROAD FROM 4-K CHOWRANGI NORTH KARACHI TO GULSHAN-E-MAYMAR YOUSUF GOTH, KARACHI

1	TOTAL AMOUNT OF BILL NO. 01 (CARRIAGEWAY)	Rs.				
2	TOTAL AMOUNT OF BILL NO. 02 (FOOTPATH / MEDIAN / ISLAND WORK)	Rs.				
3	TOTAL AMOUNT OF BILL NO. 03 (ANCILLARY WORK)	Rs.				
4	TOTAL AMOUNT OF BILL NO. 04 (SEWERAGE WORK)	Rs.				
5	TOTAL AMOUNT OF BILL NO. 05 (WATER SUPPLY WORK)	Rs.				
	GRAND TOTAL	Rs.				
The total amount is Rs (Rupees _ (In figure) (In words)						
- (which eve	for the complete job for all schedule of rate, er is included in the BOQ)	approved rate & offer rates				
I / We have attach a Bid Security as per NIT in shape of pay order bearing No amounting to Rs issued from _		dated ₋ (Bank / Branch)				
Note: * *	Tender must be qouted in figure & in word both otherwise laible to be can All over writing & correction if any must be initialed & stamped by the bid					
	Signature of th	e Contractor with Stamp				
	Address: _					

STAMP & SIGNATURE OF TENDER ISSUING AUTHORITY