

Contact: For General Queries 051-9262306, Bahria Gate 0331-5540649, Section: 051-9262307
Email: dpn@paknavy.gov.pk 051-9262307 adpn36@paknavy.gov.pk

P-36/FOR Section (Contact: 051-9262307, Email: adpn36@paknavy.gov.pk)

Tender No and Date R2603360634
Tender Description Employment/Hiring of Maintenance Dredging and Capital Dredging services for Ormara Naval
IT Opening Date 01/06/2026
Firm Name _____
Postal Address _____
Email Address for Correspondence _____
Contact Person _____
Contact Number (Landline _____) (Mobile _____)

Document to be Attached with Quotation

Firm is to submit its proposal in a sealed envelope which shall contain 03 x Sealed Envelops as per details given below:

S No	Document	Original Set	Copy Set
1	Bank Challan of Rs. 200/- for DGDP registered firms and Rs. 300/- for all other firms (in favour of CMA(DP))		
2	DP-1 Form of IT with tick mark against each clause and initiated on each page		
3	DP-2 Form of IT with compliance remarks against each clause and initiated on each page		
4	Annex A of IT duly filled (with compliance remarks)		
5	Annex B & C of IT (with compliance remarks)		
6	DP-3 Form of IT (duly filled & Signed)		
7	Manufacturer Authorization letter (where applicable)		
8	Manufacturer Price list (where applicable)		
9	DRAP registration letter (in case of medical)		
10	DGDP Registration Letter (If firm is registered with DGDP)		
11	Tax Filling Proof		

Sealed Envelop 2 – Earnest Money

This Envelop must contain Earnest Money only.

Sealed Envelop 3 – Commercial Offer

This Envelop must contain following documents:

1	Firms Commercial Offer	01 x Original	
2	Principal Invoice (where applicable)	01 x Original	
3	Duly filled DP-2 Form of IT	01 x Original	

Firms Declaration

It is certified that we have submitted tender in compliance with above instructions and we understand

Firm's Authorized Signatures _____

DIRECTORATE PROCUREMENT (NAVY)

Directorate of Procurement (Navy)

Through Bahria Gate
Near SNIDS Centre,
Naval Residential Complex

Contact: For General Queries: 051-9262306
Bahria Gate: 0331-5540649
Section: 051-9262307

Email: dpn@paknavy.gov.pk
adpn36@paknavy.gov.pk

M/s _____

Dated :

INVITATION TO TENDER AND GENERAL INSTRUCTIONS

Dear Sir / Madem,

1. DP (Navy) invites you to tender for the supply of stores/equipment/ services as per details given in attached Schedule to Tender (Form DP-2).

2 Caution: This tender and subsequent contract agreement awarded to the successful bidder is governed by the rules / conditions as laid down in PPRA Rules-2004 and DPP&I-35 (Revised 2019) covering general terms and conditions of contracts laid down by MoDP / DGDP. As a potential bidder, it is incumbent upon you and your firm to first acquaint yourself with PPRA Rules 2004 (www.ppra.org.pk) and DPP&I-35 (Revised 2019) (print copy may be obtained from DGDP Registration Cell on Phone No. 051-9270967 before participating in the tender. If your firm / company possesses requisite technical as well financial capability, you must be registered or willing to register with DGDP to qualify for award of contract, which shall be made after security clearance and provision of required registration documents mentioned in Para 15 of this DP-1.

Understood
agreed

Understood
not agreed

3 Conditions Governing Contracts. The 'Contract' made as result of this I/T (Invitation to Tender) i.a.w PPRA Rules 2004 shall mean the agreement entered into between the parties i.e. the „Purchaser and the „Seller on Directorate General Defence Purchase (DGDP) contract Form "DP-19" in accordance with the law of contract Act, 1872 and hose contained in Defence Purchase Procedure and Instructions and DPP&I-35 (Revised 2019) and other special conditions that may be added to given contract for the supply of Defence Stores / Services specified herein.

Understood
agreed

Understood
not agreed

4 Delivery of Tender. The tender documents covering technical and commercial offers are to be furnished as under:-

a Commercial Offer: The commercial offer will be in single copy and indicate prices quoted in figures as well as in words in the currency mentioned in IT. It should be clearly marked in fact on a separate sealed envelope "Commercial Offer", tender number and date of opening. Taxes, duties, freight/transportation, insurance charges etc are to be indicated separately. Total price of the items quoted against the tender is to be clearly mentioned. In case of more than one option offered by the firm, DP(N) reserves the right to accept lowest technically accepted option if more than one options were accepted in Technical Scrutiny Report.

Understood agreed Understood not agreed

b Technical Offer: (Where Applicable). Should contain all relevant specifications in DUPLICATE (or as specified in IT) along with essential literature/brochure, drawings and compliance metrics in a separate sealed envelope and clearly marked "Technical Offer" without prices, with tender number and date of opening. Technical offer shall be opened first; half an hour after the date and time for receipt of tender mentioned in DP-2. Firms are to confirm/comply with IT technical specification in the following format:

Understood agreed Understood not agreed

S. No	Technical requirement as per IT	Firm's endorsement (Comply/Partially Comply/Non Comply)	Basis of C, PC or brochure	In case of non availability of enclosed proof from Literature, quote/attach additional documents/data/undertaking as proof of compliance

(Legend: C = Fully Comply, PC = Partially Comply, NC = Not Comply)

(Firms must clearly identify where their offer does not meet or deviates from IT Specs)

c Special Instructions. Tender documents and its conditions may please be read point by point and understood properly before quoting. All tender conditions should be responded clearly. In case of any deviation due to non-acceptance of tender conditions(s), the same should be highlighted alongwith your offered conditions. Tender may however be liable to be rejected.

Understood agreed Understood not agreed

d Firms shall submit their offers in two separate envelopes (i.e. one copy of commercial offer and two copies of the technical offers as asked in the IT) and envelopes clearly marked "Technical proposal", "Commercial proposal" in bold. The commercial offer will include rates of items/services called for and the technical offer will not indicate the rates. Both types of offers are to be enclosed in separate covers and each envelope shall be properly sealed bearing of the bidder. Each cover shall indicate type of offer, number and date of IT and IT opening date. Thereafter both the envelopes (technical and commercial offer) shall be placed in one envelope (second cover) duly sealed and signed. This cover should bear the address

of the procurement agency indicating, issuance date of IT and No, with its opening date. This should be further placed in another cover (third cover), addressed and indicated in the tender documents, without any indication that there is a tender within it.

e FORM DP-1, DP-2, DP-3 and Questionnaires. Form DP-1, DP-2 (alongwith annexes), DP-3 and Questionnaires duly filled in are to be submitted with the technical offer duly stamped/signed by the authorized signatory/ person. It is pertinent to mention that all these are essential requirement for participation in the tender.

Understood agreed Understood not agreed

f. The tender duly sealed will be addressed to the following:-

Directorate of Procurement (Navy)

Through Bahria Gate
Near SNIDS Centre,
Naval Residential

Contact: For General Queries: 051-9262306
Bahria Gate: 0331-5540649
Section: 051-9262307

Email: dpn@paknavy.gov.pk
adpn36@paknavy.gov

5 Date and Time For Receipt of Tender. Tender must reach this office by the date and time specified in the Schedule to Tender (Form DP-2) attached. This Directorate will not accept any excuse of delay occurring in post. Tenders received after the appointed/ fixed time will NOT be entertained. The appointed time will, however, fall on next working day in case of closed/forced holiday. Only legitimate/registered representatives of firm will be allowed to attend tender opening. In case your firm has sent tender documents by registered post or courier service, you may confirm their receipt at DP (Navy) on Phone No 051-9271468 well before the opening date / time.

Understood agreed Understood not agreed

6 Tender Opening. Tenders will be opened as mentioned in the schedule to tender. Commercial offers will be opened at later stage if Technical Offer is found acceptable on examination by technical authorities of Service HQ. Date and time for opening of Commercial offer shall be intimated later. Only legitimate / registered representative of firm will be allowed to attend tender opening. Tenders received after date and time specified in DP-2 would be rejected without exception and returned un-opened i.a.w Rule 28 of PPRA-2004.

Understood agreed Understood not agreed

7. Validity of Offer.

Understood agreed Understood not agreed

a. The validity period of quotations must be indicated and should invariably be 120 days from the date of opening of Technical offer or 30th June whichever is later. Firm undertakes to extend validity of offer if required by equal number of original bid period (i.e. 120 days as per original offer) i.a.w PPRA Rule-26.

b. The quoting firm will certify that in case of an additional requirement of the contract items (s) in any qty(s) within a period of 12 months from the date of signing the contract, these will also be supplied at the ongoing contract rates with discount.

8. Part Bid Firm may quote for the whole or any portion, or to state in the tender that the rate quoted, shall apply only if the entire quantity/range of stores is taken from the firm. The Director Procurement reserves the right of accepting the whole or any part of the tender or portion of the quantity offered, and firm shall supply these at the rate quoted.

Understood agreed	Understood not agreed
<input type="checkbox"/>	<input type="checkbox"/>

9. Quoting of Rates. Only one rate will be quoted for entire quantity, item wise. In case quoted rates are deliberately kept hidden or lumped together to trick other competitors for winning contract as lowest bidder, DP(N) reserves the right to reject such offers on-spot besides confiscating firms Earnest Money / Bid Security and take appropriate disciplinary action. Conversion rate of FE/LC components will be considered w.e.f. opening of commercial offer as per PPRA Rule-30(2).

Understood agreed	Understood not agreed
<input type="checkbox"/>	<input type="checkbox"/>

10. Return of I/T. ITs are to be handled as per following guidelines:

a. In case you are Not quoting, please return the tender inquiry stating the reason of NOT quoting. In case of failure to return the ITs either quoted or not quoted consequently on three occasions, this Directorate, in the interest of economy, will consider the exclusion of your firms name from our future distribution list of invitation to tender.

Understood agreed	Understood not agreed
<input type="checkbox"/>	<input type="checkbox"/>

b. For registered firm(s), case will be referred to DGDP for necessary administrative action if firms registered / indexed for tendered items/stores do not quote / participate.

c. It is a standard practice to invite all firm(s) including those unregistered with DGDP who gave their preliminary budgetary/ technical proposals to end users / indentors. If your firm has been invited to participate in the tender, you must either participate in tender. In case of your inability to do so, you must inform DP (Navy) by a formal letter/email.

11. Withdrawal of Offer. Firms shall not withdraw their commercial offers before signing of the contract and within validity period of their offers. In case the firm withdraws its offer within validity period and before signing of the contract, Earnest Money of the firm shall be confiscated and disciplinary action may also be initiated for embargo up to 01 year.

Understood agreed	Understood not agreed
<input type="checkbox"/>	<input type="checkbox"/>

12. Provision of Documents in case of Contract. In case any firm wins a contract, it will deposit following documents before award of contract:

Understood agreed	Understood not agreed
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- Proof of firms financial capability.
- Foreign Seller has to provide its Registration Number issued by respective Department of Commerce authorizing export of subject stores.
- Principal/Agency Agreement.
- Registration with DGDP (Provisional Registration is mandatory)

<input type="checkbox"/>	<input type="checkbox"/>
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13. Treasury Challan.

a. Offers by registered firms must be accompanied with a Challan form of Rs.200/- (obtainable from State Bank of Pakistan/Government Treasury) and debit able to Major Head C02501-20, Main Head-12, Sub Head 'A' Miscellaneous (Code Head 1/845/30). Each offer will be covered by one Challan.

Understood agreed	Understood not agreed
<input type="checkbox"/>	<input type="checkbox"/>

b. Firms, un-registered / un-indexed with GDP (Registration Section) are to participate in the tender by submitting Challan Form of Rs 300 in favour of CMA (DP).

14. Earnest Money/Tender Bond: Please ensure Earnest Money is contained in a separate envelop (not inside Technical or commercial offer). Offer is liable to be rejected in case Earnest Money is packed inside commercial or Technical offer. Your tender must be accompanied by a Call Deposit Receipt (CDR) in favor of CMA (DP), Rawalpindi for the following amounts:-

Understood
agreed

Understood
not agreed

a. Submitting improper Earnest Earnest Money/Bid Security furnished with tender is strictly in conformity of tender/IT conditions (Clause 14 of DP-1 and clause 10 of DP-2) on the subject. We have no objection on confiscation of Earnest Money/Bid security and rejection of our offer in case amount of Earnest Money/Bid Security is improper/insufficient in violation of IT condition.

b. Rates for Contract The rate of earnest money and its maximum cell for different categories OF FIRMS would be as under:-

(i) Registered/Indexed/Pre-Qualified Firms 2% of the quoted value subject to maximum ceiling of Rs. 0.500 Million.

(ii) Registered/Pre-Qualified but Un-indexed 3% of the quoted value subject to maximum ceiling of Rs. 0.750 Million.

(iii) Unregistered/not Pre-Qualified/Un-indexed 5% of the quoted value subject to maximum ceiling of Rs. 1.000 Million.

c. Return of Earnest Money (i) Earnest money to the unsuccessful bidders will be returned on finalization of the contract.

(ii) Earnest money of the firm/firms with whom contract is concluded will be returned on submission of Bank Guarantee and its acceptance by CMA (DP).

15. Documents for provisional registration: In case your firm wins a contract on Earnest Money (EM) , it will deposit following documents to DGDP (Registration Section) before the award of contract for provisional registration:-

Understood
agreed

Understood
not agreed

S No	Local Supplier	Foreign Supplier
a.	Three filled copies of SVA-8121 of each member of management.	Three filled copies of SVA-8121-D of each member of management.
b.	Three filled copies of SVA-8121-A	Three filled copies of SVA-8121.
c.	Three photocopies of NIC for each member of management.	Three photocopy of Resident Card or equivalent identification Card for each member of management.
d.	Three PP size photographs for each member of management.r	Three PP size Photographs for each member of management.
e.	Challan Form	Challan Form
f.	Bank Statement for last one year.	Financial standing/audit balance
g.	Photocopy of NTN	Photocopy of passport
h.	Foreign Principal Agency Agreement in case of local agent.	Agency Agreement in case of Trading House/ Company/ Exporter /Stockiest etc.

16. Inspection Authority. CINS, Joint Inspection will be carried out by INS, Consignee and Specialist User or a team nominated by Pakistan Navy. CINS inspection shall be as prescribed in DPP & I-35 (Revised 2019) or as per terms of the contract.

Understood
agreed

Understood
not agreed

17. Condition of Stores. Brand new stores will be accepted on Firms Warranty/Guarantee Form DPL-15 enclosed with contract.

Understood
agreed

Understood
not agreed

18. Documents Required. Following documents are required to be submitted along with the quote:

Understood
agreed

Understood
not agreed

a. OEM/Authorized Dealer/Agent Certificate along with OEM Dealership Evidence.

b. The firm/supplier shall provide correct and valid e-mail and Fax No to CINS and DP(N). Supplier/contracting firm shall either provide OEM Conformance Certificate to CINS or is to be e-mailed to CINS under intimation to DP (Navy). Hard copy of COC must follow in any case through courier. On receipt, CINS shall approach the OEM for verification of Conformance Certificates issued by OEM. Companies/firms rendering false OEM Conforming Certificates will be blacklisted.

c. Original quotation/Principal/OEM proforma invoice.

d. In case of bulk proforma invoice, a certificate that prices indicated in the bulk proforma invoice have not been decreased since the date of bulk proforma invoice from the manufacturers/suppliers.

e. Submit breakup of cost of stores/services on the following lines:

(i) Imported material with break down item wise along-with import duties.

(ii) Variable business overheads like taxes and duties imposed by the federal/provincial government as applicable:-

(1) General Sales Tax

(2) Income Tax

(3) Custom Duty. PCT code along with photocopy of the related page is to be attached where applicable.

(4) Any other tax duty.

(iii) Fixed overhead charges like labour, electricity etc.

(iv) Agent commission/profit, if any.

(v) Any other expenditure/cost/service/remuneration as asked for in the tender.

19. Rejection of Stores/Services. The stores/services offered as a result of contract concluded against this tender may be rejected as follows:

Understood
agreed

Understood
not agreed

a. 1st rejection on Govt. expense

b. 2 nd rejection on supplier expense

c. 3rd rejection contract cancellation will be initiated.

2 0 . Rejection of Stores/Services. To ensure timely and correct supply of stores the firm will furnish an unconditional Bank Guarantee (BG in the currency in which contract is concluded) from a schedule Bank of Pakistan for an amount upto 10 % of the contract value (excluding Taxes, duties/freight handling charges) on a Judicial Stamp Paper (All pages) of the value of (Rs 100.00) as per prescribed format or in shape of CSD/Bank draft. The Bank Guarantee shall be endorsed in favour of CMA (DP) Rawalpindi who is the Accounts Officer specified in the contract. The CMA (DP) Rawalpindi has the like power of seeking encashment of the Bank Guarantee as if the same has been demanded by the purchaser himself. The Bank Guarantee shall be produced by the supplier within 30 days from the date of issue of the contract and remain valid for upto 60 days after completion of warranty period and remain in force till one year ahead of the delivery date given in the contract. If delivery period is extended, the supplier shall arrange the extension of Bank Guarantee within 30 days after the original delivery period to keep its validity always one year ahead of the extended delivery period. The BG form can be obtained from DP(N) on e-mail address given on page 1. Format of BG is enclosed at Annex B.

Understood
agreed

Understood
not agreed

2 1 . Integrity Pact. There shall be "zero tolerance" against bribes, gifts, commission and inducement of any kind or their promises thereof by Supplier / Firm to any Government official / staff whether to solicit any undue benefit, favour or otherwise. Following provisions must be clearly read and understood for strict compliance:

Understood
agreed

Understood
not agreed

a. Integrity Pact shall be applicable to all tenders / contracts irrespective of their financial value. However, a written Integrity Pact shall be signed for contracts exceeding Rs 10 Million between the procuring agency and the supplier / contractor i.a.w Rule-7 of PPRA-2004. The form is available at www.ppra.org.pk or can be requested at dpn@paknavy.gov.pk

b. If a Supplier / Contractor is found involved in any unbusiness-like / unethical activity, same would be considered a serious breach of the Integrity Pact. DP (Navy) shall take severe disciplinary action against that person(s) and the firm / company, which may include, but not limited to, PERMANENT BLACKLISTING of firm / company through DGDP and legal action against the individual (s) involved as per Pakistans Code of Criminal Procedure.

c. It is strictly forbidden to socialize, call or meet any official / staff of DP (Navy) in private or during off hours. If any official / staff from Purchaser side asks for any undue favour or gratification directly or indirectly, the matter is to be immediately brought to the personal notice of Director Procurement (Navy) on Respective Section Tel: 051-9271468 or through a personal meeting in office. Privacy of firms and their Reps sharing such information will be guaranteed without any prejudice to their normal business activities.

2 2 . Correspondence. All correspondence will be addressed to the Purchaser i.e. DP (Navy). Correspondence with regard to payment or issue of delivery receipt may be addressed to CMA Rawalpindi and Consignee respectively with copy endorsed to the DP (Navy).

Understood
agreed

Understood
not agreed

2 3 . Pre-shipment Inspection. PN may send a team of officers including DP(N) member for the inspection of major equipments and machinery items at OEM premises as per terms of contract. If not already provided for and mentioned in the I.T, firm(s) must clarify the place, number of persons, duration and whether expenses on such visits would be borne by the Purchaser or Contractor. In case contractor is responsible for bearing such expenses, detailed breakdown of the same should be given separately in the commercial offer.

Understood
agreed

Understood
not agreed

24. Amendment to Contract. Contract may be amended/modified to include fresh clause (s) modify the existing clauses with the mutual agreement by the supplier and the purchaser; such modification shall form an integral part of the contract

Understood
agreed

Understood
not agreed

25. Discrepancy. The consignee will render a discrepancy report to all concerned within 60 days after receipt of stores for discrepancies found in the consignment. The quantities found short are to be made good by the supplier, free of cost.

Understood
agreed

Understood
not agreed

26. Price Variation.

Understood
agreed

Understood
not agreed

- a. Prices offered against this tender are to be firm and final.
- b. Where the prices of the contracted stores/raw material are controlled by the government or an agency competent to do so on government behalf then price increase/decrease will be allowed at actual on case to case basis on production of government notification by the Supplier for the subject stores where the firms are contractually obliged and bound to produce the stores from raw materials supplied by government/State controlled departments in consultation with Military Finance.
- c. Except for calculation or typographical errors, the rates of the contracts not having a price variation clause PVC clause will not be increased subsequently. But when such an increase is considered desirable in the interest of expeditious supply of stores and is necessitated by the circumstances beyond the control of the Supplier, the case may be decided accordingly.

27. Force Majeure.

Understood
agreed

Understood
not agreed

- a. The supplier will not be held responsible for any delay occurring in supply of equipment due to event of Force Majeure such as acts of God, War, Civil commotion, Strike, Lockouts, Act of Foreign Government and its agencies and disturbance directly affecting the supplier over which events or circumstances the supplier has no control. In such an event the supplier shall inform the purchaser within 15 days of the happening and within the same timeframe about the discontinuation of such circumstances / happening in writing. Non-availability of raw material for the manufacture of stores, or of export permit for the contracted stores from the country of its origin, shall not constitute Force Majeure.
- b. The Supplier shall provide the Purchaser with all the necessary proof of the occurrence of the events and its effect on the contract performance within 30 days from the start to force majeure event.
- c. The Purchaser shall be entitled to conduct investigation into the cause of delay reported by the Supplier.
- d. Where the delay was due to genuine force majeure event it shall extend the delivery for a period of equal to the period in which such force majeure remains operative.
- e. Such extension in delivery period, due to force majeure, shall not entitle the Suppliers to claim any extra from the Purchaser.

28. Arbitration. Parties shall make their attempt to settle all disputes arising under this contract through friendly discussions in good faith. In the event that either party shall perceive such friendly discussion to be making insufficient progress towards settlement of dispute (s) at any time, then such party may be written notice to the other party refer the dispute (s) to final and binding arbitration as provided below:

Understood agreed Understood not agreed

- a. The dispute will be referred for adjudication to two arbitrators one to be nominated by each party, who before entering upon the reference shall appoint an umpire by mutual agreement, and if they do not agree a judge of the Superior court shall be requested to appoint the umpire. The arbitration proceedings shall be held in Pakistan and under Pakistani Law.
- b. The venue of the arbitration shall be the place from which the contract is issued or such other places as the Purchaser at his discretion may determine.
- c. The arbitration award shall be firm and final.
- d. In course of arbitration the contract shall be continuously be executed except that part which is under arbitration
- e. All proceedings under this clause shall be conducted in English language and in writing

29. Court of Jurisdiction. In case of any dispute only court of jurisdiction at Rawalpindi, Pakistan shall have jurisdiction to decide the matter

Understood agreed Understood not agreed

30. Liquidated Damages(LD). Liquidated Damages upto 2% per month are liable to be imposed on the suppliers by the purchaser in accordance with DPP & I-35, if the stores supplied after the expiry of the delivery date without any valid reasons. Total value of LD shall not exceed 10% of the contract value.

Understood agreed Understood not agreed

31. Risk Purchase. In the event of failure on the part of supplier to comply with the contractual obligations the contract will be cancelled at the Risk and Expense (RE) of the supplier in accordance with DPP & I-35.

Understood agreed Understood not agreed

32. Compensation Breach of Contract. If the contractor fails to supply the contracted stores or contract is cancelled either on RE or without RE or contract become ineffective due to default of supplier / seller or stores / equipment declared defective and caused loss to the Government, contractor shall be liable to pay to the Government compensation for loss or inconvenience resulting for his default or from the rescission of his contract when such default or rescission take place such compensation will be in excess to the RE amount, if imposed by the competent authority. Compensation amount in terms of money will be decided by the purchase officer and will be deposited by contractor / seller in Government treasury in the currency of contract.

Understood agreed Understood not agreed

33. Gratuities/Commission/Gifts. No commission, rebate, bonus, fee or compensation in any form shall be paid to any local or foreign agent, consultant representative, sales promoter or any intermediary by the Manufacturer/Supplier except the agent commission payable as per the agent commission policy of the government and as amended from time to time and given in the contract. Any breach of such clause(s) of the contract by Manufacturer/Supplier and/or their sole nominated representative may result in cancellation of the contract blacklisting of the Manufacturer/Supplier financial penalties and all or any other punitive measure which the purchaser may consider appropriate.

Understood
agreed

Understood
not agreed

34. Termination of Contract.

a. If at any time during the currency of the contract the Purchaser decides to terminate the contract for any reason whatsoever (other than for reasons of Non-Delivery) he shall have right to do so by giving the Supplier a registered notice to that effect. In that event the Purchaser will accept delivery at the contract price and terms of such stores/goods/services which are in the actual process of manufacture that is completed and ready for delivery within thirty days after receipt by the Supplier of such notice.

Understood
agreed

Understood
not agreed

b. In the case of remainder of the undelivered stores/goods/services the Purchaser may elect either:

(i) To have any part thereof completed and take the delivery thereof at the contract price or.

(ii) To cancel the remaining quantity and pay to the Supplier for the articles or sub-components or raw materials purchased by the Supplier and are in the actual process of manufacture at the price to be determined by the Purchaser. In such a case materials in the process of manufacture shall be delivered by the Supplier to the Purchaser.

c. Should the Supplier fail to deliver goods/services in time as per quality terms of contract or fail to render Bank Guarantee within the stipulated time period or any breach of the contract the Purchaser reserves the right to terminate/cancel the contract fully or any part thereof at the risk and

35. Rights Reserved. Directorate of Procurement (Navy), Rawalpindi reserves full rights to accept or reject any or all offers including the lowest. Grounds for such rejections may be communicated to the bidder upon written request, but justification for grounds is not required as per PPRA Rule 33 (1).

Understood
agreed

Understood
not agreed

36. Application of Official Secrets Act, 1923. All the matters connected with this enquiry and subsequent actions arising there from come within the scope of the Official Secrets Act, 1923. You are, therefore, requested to ensure complete secrecy regarding documents and stores concerned with the enquiry and to limit the number of your employees having access to this information.

Understood
agreed

Understood
not agreed

37. Acknowledgment. Firms will send acknowledgement slips within 07 days from the date of downloading of IT from the PPRA Website i.e. WWW.PPRA.ORG.PK

Understood agreed Understood not agreed

38. Disqualification. Offers are liable to be rejected if:-

Understood agreed Understood not agreed

- a. Received later than appointed/fixed date and time.
- b. Offers are found conditional or incomplete in any respect.
- c. There is any deviation from the General /Special/Technical Instructions contained in this tender.
- d. Forms DP-1, DP-2 (along with Annexes), and DP-3 duly signed, are NOT received with the technical offer.
- e. Taxes and duties, freight/transportation and insurance charges NOT indicated separately as per required price breakdown mentioned at Para 17.
- f. Treasury challan is NOT attached with the technical offer.
- g. Multiple rates are quoted against one item.
- h. Manufacturers relevant brochures and technical details on major equipment assemblies are not attached in support of specifications.
- i. Subject to restriction of export license.
- j. Offers (commercial/technical) containing non-initialed/ unauthenticated amendments/corrections/overwriting.
- k. If the validity of the agency agreement is expired.
- l. The commercial offer against FOB/CIF/CandF tender is quoted in local currency and vice versa.
- m. Principals invoice in duplicate clearly indicating whether prices quoted are inclusive or exclusive of the agent commission is not enclosed.
- n. Earnest money is not provided.
- o. Earnest Money is not provided with the technical offer (or as specified).
- p. If validity of offer is not quoted as required in IT or made subject to confirmation later.
- q. Offer made through Fax/E-mail/Cable/Telex.
- r. If offer is found to be based on cartel action in connivance with other sources/ participants of the tender.
- s. If OEM and principal name and complete address is not mentioned.
- t. Original Principal Invoice is not attached with offer.

39. Appeals by Supplier/Firm. Any aggrieved Supplier/Firm against the decision of DP (N) or CINS or any other problematic area towards the execution of the contract may prefer an Appeal to Standing Appeal Committee (SAC) comprising PN Officers and military finance rep at Naval headquarters, Islamabad. The detail and timeline for preferring appeals is given below:

Understood agreed Understood not agreed

S.No	Cetegary of Appeal	Limitation Period
a	Appeals for liquidated damages	Within 30 days decision
b	Appeals for reinstatement of contracts	Within 30 days decision
c	Appeals for risk and expense amount	Within 30 days decision
d	Appeals for rejection of stores	Within 30 days decision
e	Appeals in all other Cases	Within 30 days decision

40. Limitation Any appeal received after the lapse of timelines given in para 39 above shall not be entertained.

Understood
agreed

Understood
not agreed

41. For Firms not Registered with For Firms not Registered with DGDP. Firms not registered with DGDP undertake to apply for registration with DGDP prior signing of Contract. Details can be found on DGDP website ww.dgdp.gov.pk. These firms can participate in tender law paras 12 and 14 above

Understood
agreed

Understood
not agreed

42. Firms which are not registered with DGDP should initiate provisional registration in accordance with Para 41. Besides, ground check by Field Security (FS) Team will be made for security clearance related to participation in the tender after technical opening. Firms undertake to provide following documents for ground check by FS Team:

Understood
agreed

Understood
not agreed

- a. NTN
- b. Income Tax Return
- c. Sales Tax Return
- d. Sales Tax Certificate
- e. Chamber of Commerce Industry Certificate
- f. Professional Tax Certificate (Excise and Taxation)
- g. Office/Home/Ware House Property documents
- h. Utility Bills (Phone/Electricity)
- j. Firm Vehicle/Personal Vehicle
- k. CEO Visiting Card/NIC Copy, 03Xspecimen signature of CEO
- l. DGDP Registration letter
- m. Firm Bank Statement
- n. Non Black List Certificate
- p. 2 X Witness + CNIC and Mobile Numbers
- q. Police Verification
- r. Agency Agreement
- s. OEM Certificate
- t. ISO Certificate
- u. Stock List with value
- v. Company Profile/Broachers
- w. Employees List
- x. Firm Categories
- y. Sole Proprietor Certificate
- z. Partnership Deed
- aa. Pvt Limited
- ab. Memorandum of Articles
- ac. Form 29 and Form A
- ad. Incorporation Certificate

43. We solemnly undertake that all IT clauses marked as "Understood and Agreed" shall not be changed / withdrawn after tender opening. The IT provisions accepted shall form the baseline for subsequent contract negotiations.

Understood
agreed

Understood
not agreed

44. The above terms and conditions are confirmed in total for acceptance.

Understood
agreed

Understood
not agreed

45. Format of DPL-15 (warranty form) and PBG are enclosed as Annex A and B.

Understood
agreed

Understood
not agreed

Sincerely yours,

(To be Signed by Officer Concerned)

Rank: _____

NAME: _____

DPL-15 (WARRANTY)

FIRM'S NAME M/s _____

1. We hereby guarantee that the articles supplied under the terms of this contract are produced new in accordance with approved drawings/specification and in all respect in accordance with the terms of the contract, and the materials used whether or not of our manufacture are in accordance with the latest appropriate standard specifications, as also in accordance with the terms of complete of good workmanship throughout and that we shall replace FOR/DDP Karachi free of cost every article or part thereof use or in use shall be found defective or not within the limits and tolerance of specifications requirement or in any way not in accordance with the terms of the contract.
2. In case of our failure to replace the defective stores free of cost within a reasonable period, we shall refund the relevant cost FOR/DPP Karachi (As the case may be in currency in with received).
3. This warranty shall remain valid for 01 Year after the acceptance of stores by the end user

The signature must be the same as that on the tender/contract, or if otherwise must be shown to be the signature of a person capable of giving a guarantee on behalf of the contractor

SIGNATURE _____
DATE _____
PLACE _____

BANK GUARANTEE FOR PERFORMANCE ON
JUDICIAL STAMP PAPER OF RS. 100/- OR
AS SUITABLE TO THE AMOUNT OF BG

- (i) Contract No. _____ dated _____
(ii) Name of Firm/Contractor _____
(iii) Address of Firm/Contractor _____
(iv) Name of Guarantor _____
(v) Address of Guarantor _____
(vi) Amount of Guarantee Rs. _____
(_____)
(in words)
(vii) Date of expire of Guarantee _____

To: The President of Islamic Republic of Pakistan through the
Controller of Military Accounts (Defence Purchase) Rawalpindi.

Sir

1. Whereas your good self have entered into Contract No.

_____ dated _____
with Messers _____

(Full Name and Address)

hereinafter referred to as our customer and that one of the conditions of the Contract is
the submission of unconditional Bank Guarantee by our customer to your good self for a
sum of Rs. _____ Rupees/FE (as applicable) _____

2. In compliance with this stipulation of the contract, we hereby agree and undertake as
under: -

a. To pay to you unconditionally on demand and/or without any reference to our Customer
and amount not exceeding the sum or Rs. _____ Rupees or
FE (as applicable) _____ as would be mentioned in
your written Demand Notice.

b. To keep this Guarantee in force till _____.

c. That the validity of this Bank Guarantee shall be kept one clear year ahead of the
original/extended delivery period or the warrantee of the stores which so ever is later in
duration on receipt of information from our Customer i.e. M/s _____
or from your office. Claim, if any must be duly received by us on or before this day. Our
liability under this Bank Guarantee shall cease on the closing of banking hours on the last
date of the validity of this Bank Guarantee. Claim received thereafter shall not be
entertained by whether you suffer a loss or not. On receipt of payment under this
guarantee, this document i.e. Bank Guarantee must be clearly cancelled, discharged and
returned to us.

d. That we shall inform your office regarding termination of the validity of this Bank Guarantee one clear month before the actual expiry date of this Guarantee.

e. That with the consent of our customer you may amend/alter any term/clause of the contract or add/delete any term/clause to/from this contract without making any reference to us. We do not reserve any right to receive any such amendment/alternation or addition/deletion provided such like actions do not increase our monetary liability under this Bank Guarantee which shall be limited only to Rs. _____ (Rupees _____).

f. That the Bank Guarantee herein before given shall not be affected by any change in the constitution of the Bank or Customer/Seller or Vendor.

g. That this an unconditional Bank Guarantee, which shall be encashed on sight on presentation without any reference to our Customer/Seller or Vendor.

Guarantor

Dated: _____

(Bank Seal and Signatures)

AFFIDAVIT/UNDERTAKING
(WORTH RS. 100/- ON JUDICIAL STAMP PAPER)

Mr _____ Authorized signatory/
Partner/MD of M/s _____, do hereby solemnly affirm to DGP
(Army), DP (Navy), DP (Air) and Directorate General Defence Purchase, Ministry of Defence
Production, Rawalpindi that our firm M/s _____ has applied for registration
with Director General Defence Purchase (DGDP) duly completed all the documents required by
registration section on _____ (date) i.e before signing the contract. I certify that the above
mentioned statement is correct. In case it is detected on any stage that our firm has not applied
for registration with Director General Defence Purchase or statement given above is incorrect,
our firm will be liable for disciplinary action initiated (i.e debarring, the firm do business with
other Defence Establishment and Govt Agencies). I also accept that any disciplinary action
taken will not be challenged in any Court of Law.

Station: _____
Date: _____

Signature: _____
Name: _____
Appointment in Firm: _____

ATTESTED BY OATH COMMISSIONER WITH STAMP

INVITATION TO TENDER FORM

1. Schedule to Tender No. 2590099\R2603\360634 Dated 09-03-2026 This tender will be closed for acceptance at 1030 Hours and Will be opened at 11:04 Hours on 2026-06-01
2. 11:00 Please drop tender in the Tender Box No. 205
3. You are requested to please use this Performa for price quotation, fill in the prices, affix your stamp on the same, sign it and forward it in original as your Commercial offer along with the covering letter of your firm. If you do not use this form as price quotations your offer might be rejected.
4. You are requested to please attach DP-1 and DP-3 alongwith your quotation duly signed and stamped. Same are available at www.ppra.org.pk

S NO	DETAIL OF STORES	QTY	UNIT PRICE	TOTAL PRICE
1	10m depth at ONH Detailed: Technical Specification Special Instructions: As Per Annex A General Instructions : As Per Annex B	1.0 Meter		
2	9m depth at ONH Detailed: Technical Specification Special Instructions: As Per Annex A General Instructions : As Per Annex B	1.0 Meter		
Above mentioned price includes 18% sale Tax (Please tick Yes or No)		Yes		No
Grand Total				

Terms and Conditions

1. Terms of Payment As per Annex B
2. Origin of OEM to be indicated by firm
3. Origin of Stores to be indicated by firm
4. Technical Scrutiny Report Required
5. Delivery Period Within 6 months for maintenance dredging and 10 months for Capital dredging after CED
6. Currency PAK RUPEES
7. Basis for acceptance FOR
8. Bid validity The validity period of quotations must be indicated and should invariably be 120 days from the date of opening of technical offer or 30th June whichever is later. Firm undertakes to extend validity of offer if required by equal number of original bid period (i.e. 120 days as per original offer) i.a.w PPRA Rule-26.
9. Tendering procedure Single Stage - Two Envelopes
bidding procedure will be followed . PPRA Rule 36 refers.

10. Earnest Money/Tender Bond

Please ensure Earnest Money is contained in a separate envelop (not inside Technical or commercial offer). Offer is liable to be rejected in case Earnest Money is packed inside commercial or Technical offer. Your tender must be accompanied by a Call Deposit Receipt (CDR) in favor of CMA (DP), Rawalpindi for the following amounts:-

a. Submitting improper Earnest Money/Bid Security Earnest Money/Bid Security furnished with tender is strictly in conformity of tender/IT conditions (Clause 14 of DP-1 and clause 10 of DP-2) on the subject. We have no objection on confiscation of Earnest Money/Bid security and rejection of our offer in case amount of Earnest Money/Bid Security is improper/insufficient in violation of IT condition.

b. Rates for Contract. The rate of earnest money and its maximum ceil for different categories OF FIRMS would be as under:-

(i) Registered/Indexed/Pre-Qualified Firms. 2% of the quoted value subject to maximum ceiling of Rs. 0.500 Million.

(ii) Registered/Pre-Qualified but Un-indexed 3% of the quoted value subject to maximum ceiling of Rs. 0.750 Million.

(iii) Unregistered/not Pre-Qualified/Un-indexed 5% of the quoted value subject to maximum ceiling of Rs. 1.000 Million.

c. Return of Earnest Money. (i) Earnest money to the unsuccessful bidders will be returned on finalization of the contract.
(ii) Earnest money of the firm/firms with whom contract is concluded will be returned on submission of Bank Guarantee and its acceptance by CMA (DP).

13. Special Note.

All Participating firms must submit technical offers in duplicate (one for TSR committee and one for DP (Navy) record).

- a. Unregistered (Not registered with Directorate General Defense Purchase) firms must provide the documentary evidence of their financial capability to undertake the project.
- b. Unregistered firms are to submit a certificate along with their Technical offer stating that the firm is not black listed by any government organization and not under disciplinary trial or embargo.
- c. Only registered suppliers on Active Taxpayers List (ATL) of FBR are eligible to participate in the Tender and submit quote.
- d. Release of payments is subject to mandatory submission of Filer Certificate duly issued by FBR showing the name of supplier on Active Taxpayers List (ATL). No payment will be released by CMA (DP) unless latest Filer Certificate duly issued by FBR showing the name of supplier on its Active Taxpayers list is submitted alongwith payment documents.
- e. In case of Pakistani firms, sales tax, NTN and income tax registration certificates are to be attached with the offer. These certificates are mandatory with the BID, otherwise offer shall be REJECTED.
- f. Company registration certificates are to be attached with offer.
- g. Requisite amount of earnest money (in shape of CDR/Demand Draft/Pay Order in the favour of CMA (DP) is to be attached in separate envelop in sealed condition with the Technical offer. Photocopy of the same shall also be attached with DP-2 as a testimony. Cheques/crossed cheques shall not be accepted. Technical offers received without earnest money shall not be accepted and will be rejected on spot.
- h. Duly completed Form DP-1 and DP-3 are to be attached with Technical Offer.
- i. DP-2 Form shall also be submitted with Technical Offer without mentioning of prices. Moreover, compliance or otherwise against each para/requirement of Annex A, B & C duly signed and stamped by firm authorized rep is to provide for technical scrutiny.
- j. Price preference is admissible to local manufacturers over foreign vendors as per PPRA Rule 24 and Govt of Pakistan (Ministry of Commerce) SRO 827 (I)/2001.

Note: In case of failure to comply above instructions, Terms and conditions, offer will liable for rejection.

DP-3

Tender No .R2603360634.....

Name of the Firm.....
DGDP Registration No.....
Mailing Address.....
Date.....
Telephone No.
Official E-Mail.....
Fax No
Mobile No of contact person.....

To:

Directorate of Procurement (Navy)
through Bahria Gate Near SNIDS
Center, CDA Market
at Naval Residential Complex
Sector E-8, Islamabad
Tele : 051-9262310
Email : dpn@paknavy.gov.pk

Dear Sir, 1. I/We hereby offer to supply to the Director of Procurement (Navy) the stores detailed in schedule to the tender inquiry or such portion thereof as you may specify in the acceptance of tender at the prices offered against the said schedule and further agree that this offer will remain valid up to 120 day and will not be withdrawn or altered in terms of rates quoted and the conditions already stated therein or on before this date. I/we shall be bound by a communication of acceptance to be dispatched within the prescribed time. 2. I/We have understood the Instructions to Tenders and General Conditions Governing Contract in Form No. DDP&I (Revised-2019) included in the pamphlet entitled, Government of Pakistan, Ministry of Defence (Directorate General Defence Purchase) "General Conditions Governing Contracts" and have thoroughly examined the specifications/drawings and/ or patterns quoted in the schedule hereto and am/are fully aware of the nature of the stores required and my/our offer is to supply stores strictly in accordance with the requirements. 3. The following pages have been added to and form part of this tender:

- a.
- b.
- c.

YOURS FAITHFULLY,

.....
(SIGNATURE OF TENDERER)
.....
(CAPACITY IN WHICH SIGNING)
ADDRESS:.....
DATE.....
SIGNATURE OF WITNESS.....
ADDRESS.....

*Individual signing tender and/or other documents connected with a contract must specify:-

- (a) Whether signing as "Sole Proprietor" of the firm or his attorney.
- (b) Whether signing as a "Registered Active Partner" of the firm or his attorney.
- (c) Whether signing for the firm "per procuracy".
- (d) In the case of companies and firms registered under the Act, 1913 as amended up-to-date and under the Partnership Act 1932, the capacity in which signing e.g., the Director, Secretary, Manager, Partner, etc. or their attorney and produce copy of document empowering him so to sign, if called upon to do so.
- (e) Principal's proforma invoice (in original)
- (f) Earnest money
- (g) Treasury Challan Form for tender Fees as applicable

Annex 'A'

Indent No 2590099

Dated: 09 Mar 26

HIRING OF MAINTENANCE AND CAPITAL DREDGING SERVICES ORMARA NAVAL HARBOUR

S NO	Technical Specification	Contractors remarks			
1.	<p><u>Introduction</u></p> <p>Ormara Naval Harbour (ONH) is located at Ormara, Balochistan Province. The harbour was developed in 90's. The channel and basin were dredged to 10 meter in 1996/97 during port construction. The existing ONH channel and basin requires maintenance dredging upto 9m depth, whereas, the additional basin area requires capital dredging upto 10m depth. Hence, out sourcing of following dredging services in a stipulated time frame is required:</p> <ul style="list-style-type: none">a. Maintenance dredging services to achieve desired depth of 9m at existing channel & basin area.b. Capital dredging services to achieve desired depth of 10m at new basin area.				
2.	<p><u>Scope Of Dredging Work</u></p> <p>a. Employment/Hiring of following dredging services for ONH:</p> <ul style="list-style-type: none">(1) Maintenance dredging of existing Channel & basin upto 9m depth to meet operational requirement of Pakistan Navy. Detail of areas to be dredged, their limits is covered in Appendix I to Annex A.(2) Capital dredging of basin area beside Ormara yard, to achieve surface depth of 10m to meet operational requirement of Pakistan Navy. Detail of areas to be dredged, their limits is covered in Appendix I to Annex A. Main contours of dredging work are as under:				
	<table border="1"><thead><tr><th>S.NO</th><th>DESCRIPTION</th><th>REQUIREMENT</th></tr></thead></table>	S.NO	DESCRIPTION	REQUIREMENT	
S.NO	DESCRIPTION	REQUIREMENT			

1.	Dredging Areas	(a) ONH existing channel and basin (maintenance dredging work) (b) ONH new basin (Capital dredging work)
2.	Existing Depths in dredging areas(a)	Existing channel (5.7m to 10m) and basin (6m to 10m) (b) New basin - Variable, ranging between -0.6m to 8.5m
3.	Estimated volume to be dredged in main area	Approx 4 Million cubic meter (a) Maintenance dredging volume approx. 1.2 Million cubic meter (b) Capital dredging volume approx. 2.8 Million cubic meter. Note: ± 10% (Same shall be computed again through joint IN survey).
4.	Required Depth / surface to be achieved	a) Existing channel & basin 9m and from Chart Datum referred from STFA Bench Mark at south wharf of ONH. (b) New basin area 10m from Chart Datum referred from STFA Bench Mark at south wharf of ONH.
5.	Contract Phases	(a) Phase-I Maintenance dredging of existing ONH channel and basin (b) Phase-II Capital dredging of new basin area
6.	Standard Slope Ratio	1:5 shall be maintained (as per drawing).
7.	Slope near jetty OY (Ormand Yard) and existing basin wharves and piers.	:0 shall be maintained.

8.	Soil condition	Mud, Sand and composite Clay (bore table data enclosed).
9.	Tolerance	(-0.3m) of the dredging area (new basin and existing channel and basin (over dredged not payable).

Note-1: Tolerances measured vertically with the positive values reflecting elevation above the design level.

Note-2: The quantities shown are approximate estimates of the quantity of each work for the convenience of forming a common basis for bidding.

b. Overview and approximate coordinates of the survey and dredging areas are given at **Appendix I to Annex A.**

c. Detail of dredging guidelines are at **Appendix II to Annex A.**

d. No portion of the finished dredging work shall be left above designed level higher than that indicated on the drawings. (i.e 10m and 9m depth w.r.t chart datum, with slope 1:5 in basin and existing channel)

e. Contractor shall undertake capital dredging of new basin area upto 10m and maintenance dredging of existing channel & basin upto 9m including slopes in stipulated timeline including **Mobilization, IN, OUT and interim surveys.** Contractor shall be responsible to arrange all survey equipment, software and platform at his own cost.

f. Contractor is bound not to disturb/ damage any infrastructure during dredging work. Only dredging site material shall be removed. Contractor shall deploy suitable and proven dredging platforms conforming capital and maintenance dredging requirement accordingly.

3. **MEASUREMENT OF VOLUME TO BE DREDGED**

- a. The measurement for the volume to be dredged shall be determined through joint surveys as mentioned below. All the references / guidelines for hydrographic survey mentioned in Appendix III to Annex A shall be mutually agreed by the contractor and Employer's rep/ National Hydrographic Office (NHO) reps prior conduct of survey. Pre dredge/ IN Survey shall be conducted by the contractor jointly with NHO reps prior commencement of dredging. All reports, fairsheets shall be signed by the contractor, NHO rep, NHM (Ormara) and countersigned by Dy HoP.
- b. Pre dredge/ IN Survey. The contractor shall carryout a Joint Bathymetric Survey (IN Survey) and processing in the presence of NHO representative. The results shall culminate in the shape of report and fairsheets jointly signed by the contractor, NHM (Ormara), NHO survey reps and countersigned by Deputy Hydrographer of Pakistan (Dy HoP). This shall establish the start levels prior dredging/ commencement of work for achieving depth of 10m.
- c. Interim Surveys. Interim surveys shall be required to ascertain the achievement of payment milestones by the contractor. A total of 05 X interim surveys (i.e. 10%, 20%, 30%, 60%, and 80% dredge volume as per IN survey calculation) including data processing and report finalization shall be carried out jointly by the contractor. Apart from this, contractor may carryout independent surveys to monitor the progress.
- d. Post Dredge / OUT Survey. This survey shall be conducted jointly as per procedure of Pre dredge survey. Out Survey shall be carried out jointly by the contractor, within 07 seven days of receipt of completion report by contractor. Thereafter, processing report and fair sheet finalisation shall be completed within 07 (Seven) days.
- e. Should any shallow patch (depths less than the required designed depth) be discovered within dredging area during "Out Survey", the Contractor shall be required to remove the same without any extra cost to the Employer prior demobilization of dredging plant (assets/platforms) from the site. A joint survey of the relevant localized area to ascertain removal of shallow patch shall be conducted.
- f. Out survey(s) shall culminate with a Certificate duly signed by the contractor, NHM (Ormara), NHO rep and countersigned by Dy HoP and shall form the basis for handing/taking over of complete dredging area.

4. MOBILIZATION

	<p>a. The Contractor shall be permitted a period of 08 weeks (02 month) from Contract Effective Date (CED) for mobilization/ placement of assets at ONH / security clearance of its personnel so that the dredging activity culminate during non-monsoon period i.e. prior onset of monsoon.</p> <p>b. The Contractor shall intimate the equipment material and personnel intended to be moved by him to the Employer's site. The contractor shall seek permission directly from FSO(K)/SCNI in writing well in advance (Minimum 07 days) for every such movement.</p> <p>c. Contractor shall undertake security clearance of firm personnel prior mobilization of assets and personnel and shall intimate the same to NHO.</p>	
<p>5.</p>	<p><u>COMMENCEMENT OF WORK</u></p> <p>Mobilization shall be completed within the prescribed time after CED and actual survey and dredging works shall commence soon after the completion of the Mobilization (Milestone-1).</p>	
<p>6.</p>	<p><u>MATERIALS TO BE DREDGED</u></p> <p>The Contractor shall make his own assessment of the quality and nature of the materials to be dredged and provide the most suitable and proven dredging plant (e.g TSHD, CSD, Backhoe, Grab, WID, Auger, Drag flow, Plough etc.) (successfully used for similar strata) to achieve the required depth. No liability shall rest upon the Employer in any respect, with regard to the accuracy of the information given on these items in the specifications.</p>	
<p>7.</p>	<p><u>UNDERWATER DEBRIS</u></p> <p>The Contractor shall make his own assessment w.r.t. removal of underwater debris, rocks, boulders encounter, SPT during dredging operation. The contractor shall adopt necessary measures for removal of underwater obstructions without having any obligation on employer. In this regard, contractor shall undertake site investigation with no obligation on PN/ Employer. All diving operations shall be carried out in accordance with health and safety regulations in force in Pakistan. All divers shall be experienced in the class of work to be undertaken and shall operate strictly in accordance with latest course of practice and regulations and be appropriately registered. Any incident during such activity will be the sole responsibility of the contractor.</p>	

8. AVOIDANCE OF NUISANCE, POLLUTION AND DEBRIS etc.

- a. In order to mitigate the impact of dredging on environment, it is mandatory for the Contractor that the dredged material should not be spread in the open mud flats to avoid the siltation in the main channel/basin of ONH alongwith all out efforts to avoid the effects such as interference with shipping traffic, noise/oil pollution, creation of turbidity, disturbance of flora and fauna.
- b. Notwithstanding the requirements of individual parts of this specification, the Contractor shall be deemed to have allowed for and shall take the following points regarding the environmental effect of the project into account.

1. Suspended Solids

- a. The Contractor shall at all times control the spread and concentration of air or water borne suspended solids generated as a result of his activities.
- b. The Contractor shall liaise with the NHM (Ormara)/ Employer to monitor the effect of the dredging works on the water quality of the site area to ensure that statutory water quality values are complied with.

2. Waste Disposal

- a. The Contractor shall at all times maintain the areas of the Site (if required and provided) under his control in a clean and tidy condition and shall provide appropriate and adequate facilities for the temporary storage of all waste products prior to their disposal, at their own cost.
- b. The Contractor shall be responsible for the safe transportation and disposal of all wastes generated as a result of his activities. The disposal should be carried out in such a manner that it shall not harm the environment or human life. Where any third party is involved in the management of the wastes, the Contractor shall have to exercise due shall foresee, and therefore to prevent, any mismanagement of the waste generated as a result of his activities.
- c. The Contractor shall comply and meet all statutory requirements at their own cost

3. Sewage Disposal

- a. The Contractor shall be responsible for the provision of adequate sanitary facilities for his workforce including sub-contractors.
- b. The Contractor shall not allow the discharge of any untreated sanitary wastes to groundwater, waters adjacent to the navigable channel and basin Site or in sea.
- c. The Contractor shall liaise with the Engineer (NHM(O)) on the issue of sewage disposal at their own cost so that water quality values are complied with.

(4) Obstructions

(a) Obstructions caused as an unavoidable result of the dredging works in accordance with the contract shall be cleared away as soon as the dredging permits.

(b) The contractor shall keep the Employer indemnified against all claims arising from any such debris and pollution, and the price quoted shall be deemed to be inclusive of the same.

09. STAGES

a. The scope of dredging services to be performed and successfully completed by the contractor to full satisfaction of Employer shall include but not limited to the stages/phases described herein:

1. Phase 1: Mobilization and Pre Dredge/ IN Survey Mobilization shall complete with the shifting of all survey and dredging assets/gear at Ormara (duly verified and countersigned by the NHM (Ormara)). Thereafter, contractor shall carryout a Joint IN Survey and data processing. The results shall culminate in the shape of report jointly signed by the contractor surveyor, survey reps of NHO and countersigned by Dy HoP. This shall establish the start levels prior dredging.

2. Phase 2: Dredging and Interim Surveys First Interim survey shall be required to ascertain the achievement of -0.3M cubic meter (insitu-material) of dredging work by the contractor. A total of 05 interim surveys (at 10%, 20%, 30%,

60%, and 80% achievement of total insitu dredge volume) including data processing and report finalization shall be carried out jointly.

3. **Phase 3: OUT Survey** Upon completion of dredging works, OUT survey(s) of dredging area(s) shall be carried out. Upon achieving desired dredged surface/depth the contractor has to render a completion certificate. In case of any high point w.r.t design depth, a localized joint bathymetric survey shall be conducted upon dredging of high points by contractor.

10. **MATERIAL DISPOSAL**

a. **Disposal site-1** Offshore area dumping site is at **Fig-5 Appendix-I to Annex-A**. During Pre dredging/ IN survey, survey of offshore dumping site and dumping route shall be jointly carried out by the contractor. Also during post dredging/ OUT survey, dumping site and dumping route survey shall be carried out jointly for comparison and spillage of material on dumping route. Any spillage of material on dumping route or surrounding area of dredging site shall be removed by the contractor without any cost obligation on Employer. Further all material shall be disposed/ dumped at designated offshore dumping ground/area at sea.

b. **Disposal site-2** If contractor requires onshore dumping site for material disposal, same shall be considered by the Employer. Subject to approval of such request, construction and maintenance shall be the responsibility of the contractor. Contractor shall ensure that a level surface free of water should be available upon completion of dumping at onshore dumping site. Contractor shall ensure upon completion a level surface free of water should be handed over to NHM (Ormara). The bidding firm shall identify final dumping site in his proposal. **However, under no circumstances offshore or onshore site shall affect/ risk the channel and basin depths.**

c. All dredged material disposal shall be carried out in the designated offshore/onshore dumping area as specified by the Employer in the drawings placed at **Appendix I to Annex A (Fig-4)**.

d. The contractor must take all reasonable steps to protect the environment at both **disposal sites** to limit damage/ nuisance to property from pollution and other impacts of dredging operation on existing PN infrastructure including channel and basin.

e. The contractor shall provide environmental management plan for real time turbidity and water quality monitoring and **measures (silt curtains, geo-tech membrane, sheet piles and walls etc. at discharge points) to avoid siltation in surrounding area.** Measures to avoid water intrusion at disposal site-2 upon completion.

	<p>f. The contractor shall provide dredged material management plan, turbidity monitoring control and silt response procedures/ measures.</p> <p>g. The contractor shall be responsible for construction of bund/wall at dumping/disposal site-2 using appropriate means for isolating the dumping/disposal site area from surrounding water intrusion and environmental effect.</p> <p>NOTE: No additional cost shall be paid by the Employer for construction of dumping site-2.</p>	
<p>11.</p>	<p><u>PROJECT ENGINEER ON BEHALF OF EMPLOYER</u></p> <p>During the dredging project, NHM (Ormara) shall be the Engineer of the said project on behalf of the Employer for administrative activities. Detail of his responsibilities/ guideline is given at Appendix IV to Annex A.</p>	
<p>12.</p>	<p><u>HYDROGRAPHIC SURVEY SERVICES</u></p> <p>a. The contractor shall provide its service for all the surveys (IN, Interim and OUT) during the contract. All survey data shall be acquired as per hydrographic survey guidelines placed at Appendix III to Annex A. Following types of surveys shall be undertaken during the course of dredging at ONH by Contractor:</p> <ol style="list-style-type: none"> 1. Pre Dredge/ IN Survey 2. 05 x Interim Surveys 3. Post Dredge / OUT Survey(s) <p>b. Due to sensitivity of the area all the digital or hard data gather by contractor shall be handed over to NHO at the end of the project. Moreover, Contractor shall render a certificate that it doesn't possess any type of site's mapping data (topography, bathymetry, photography, design etc.). Without the foregoing, no completion shall be provided for final payments.</p>	
<p>13.</p>	<p><u>SILTATION BETWEEN IN/OUT SURVEYS</u></p> <p>Any siltation in the dredging area between IN and OUT surveys during course of dredging works and upto the end of dredging works shall be on dredging contractor's account and no</p>	

additional payments in this regard shall be made by the Employer/PN.

14.

MANDATORY REQUIREMENTS FOR BIDDING FIRMS

- a. Contracting firms including sub-contractor(s) if any, must not be Black-listed by Federal Govt. or Provincial Governments or Local Govt. or Autonomous / Semi-Autonomous bodies controlled by Federal Govt. or Local Authorities or under PPRA Rules.
- b. During contract period, contractor shall not employ any crew or staff from India, Israel or hostile country. Security clearance of firm(s), all the crew and staff by PN authorities shall be mandatory.
- c. The contractor must employ a suitable dredger with minimum insitu productivity of **-12000m³ per day** and capable to undertake capital dredging works at dredging site and suitable dredger for maintenance dredging of existing channel & basin.
- d. The contractor shall employ assets in a way to complete the project including surveys within **stipulated timeframe**.
- e. Financial bid must be in **Local Currency (PKR)**.
- f. BOQ of the proposal shall include itemize price of all the platforms, services, measures for environmental protection, risk, surveys, POL, diving, soil investigation, site information, bottom assessment etc.
- g. The following documents shall be submitted by the Contractor, as the minimum requirements, in accordance with the requirements of the Specification:
 - 1. Dredging and Placement Plan (DPP).
 - 2. Environmental Monitoring Plan (EMP).
 - 3. Proposed use of plant.
 - 4. Description of plant (type of dredger, basic dimensions and specification, suction and delivery pump diameters, booster pump stations if any, hopper barge capacity, discharge system(s), power characteristics, etc.
 - 5. The workable conditions for each type of vessel (significant wave height/period, wind and current conditions).

(6) Compliance with the Employer's health and safety and environmental management.

15. **REGULATIONS OF STATUTORY AUTHORITIES & CUSTOMS**

a. Without limiting his obligations under the General Conditions of Contract the Contractor shall observe all regulations laid down by all Statutory Authorities.

b. The Contractor shall comply with all regulations imposed by the Customs authorities in respect of the passage of all imported Contractor's Equipment, Plant, Materials and vehicles and personnel through Customs barriers.

Annex 'B'

Indent No 2590099

Dated: 09 Mar 26

HIRING OF MAINTENANCE & CAPITAL DREDGING SERVICES ORMARA NAVAL HARBOUR

S.NO	GENERAL TERMS AND CONDITIONS	Contractor remarks
1.	<p>The dredging services shall cover:</p> <ul style="list-style-type: none">a. Maintenance dredging of existing ONH channel & basin.b. Capital dredging i.v.o Ormara yard.	
2.	<p><u>DREDGING PRACTICES</u></p> <ul style="list-style-type: none">a. The firm shall provide all his services in accordance with internationally recommended best practices. All dredging plants involved during the dredging services shall comply with recognized international standards.b. The firm shall inform the Employer (DP Navy) in writing all recommended dredging practices that he intends to adopt during the dredging service.	
3.	<p><u>PAYMENT & SCHEDULE OF PAYMENTS</u></p> <ul style="list-style-type: none">a. <u>PAYMENT</u> <p>(1) Contract will be concluded in Pakistani Rupees. Payment to the Contractor will be released by CMA (DP) as per procedure in-vogue.</p>	

b. **SCHEDULE OF PAYMENTS**

(1) 20 % advance payment against ABG

(2) **Completion of IN survey** (in presence of NHO^r rep) after arrival of complete survey and dredging assets/ equipment of firm/contractor.

Up to 5% of BCP upon provision of firm's invoice and milestone completion certificate signed by employer rep.

(3) **Removal of 10%** of estimated dredging material in the area (based on joint Interim Survey results).

10% of BCP upon provision of firm's invoice and milestone completion certificate signed by employer rep.

(4) **Removal of 20%** (10 % + 10%) of estimated dredging material based on joint Interim Survey results.

10% of BCP upon provision of firm's invoice and milestone completion certificate signed by employer rep.

(5) **Removal of 30%** (20 % + 10%) of estimated dredging material based on joint Interim Survey results.

10% of BCP upon provision of firm's invoice and milestone completion certificate signed by employer rep.

(6) **Removal of 60%** (30 % + 30%) of estimated dredging material based on joint Interim Survey results.

15% of BCP upon provision of firm's invoice and milestone completion certificate signed by employer rep.

(7) **Removal of 80%** (60 % + 20%) of estimated dredging material based on joint Interim Survey results.

10% of BCP upon provision of firm's invoice and milestone completion certificate signed by employer rep.

(8) **Removal of 100%** (80 % + 20%) of estimated dredging material based on joint Interim Survey results and achieving required surface depths of 9m in existing channel & basin and 10m in new basin (as indicated in relevant sketches in **Appendix I to Annex A**) based on Out Survey(s) results.

20% of BCP upon provision of firm's invoice and milestone completion certificate signed by employer rep.

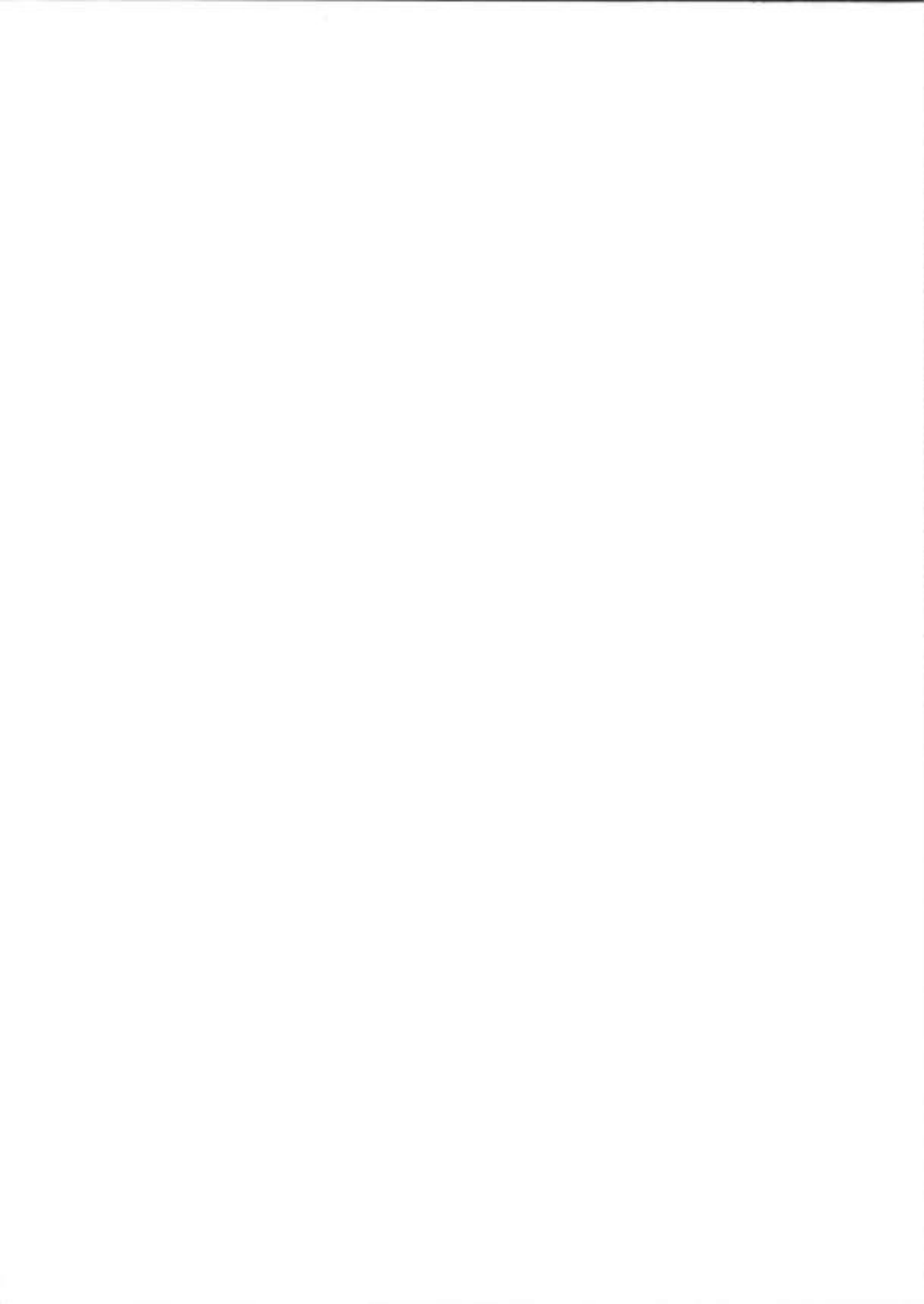
Note-1: IN/OUT/Interim surveys shall be undertaken during suitable weather. Completion certificate is placed at Appendix II to Annex B.

	<p>Note-2: Contractor is to provide schedule of work (timeline) in his proposal wrt completion of each milestone.</p>	
4.	<p><u>PERFORMANCE BANK GUARANTEE</u></p> <p>a. The firm will furnish an irrevocable and un-conditional Performance Bank Guarantee upon signing of contract (CED) from a scheduled Pakistani bank for an amount equivalent 10% of the total value of the contract (on a judicial stamp paper) of appropriate value as per prescribed format.</p> <p>b. If delivery period is extended, the CONTRACTOR shall arrange the extension of Bank Guarantee within 30 days after original delivery period to keep its validity always 90 days ahead of completion of project.</p>	
5.	<p><u>ADVANCE PERFORMANCE BANK GUARANTEE:</u></p> <p>Advance Payment Bank Guarantee will be provided by the supplier in favour of CMA(DP) within 30 days after signing of contract to the Purchaser as per Annex B for the amount of Rs.; _____ or equivalent in Pak Rupees, representing 20 % of the Contract Price through Pakistani scheduled bank. Advance Payment Bank Guarantee will remain valid for two months beyond Issuance of CRV/RV.</p>	
5.	<p><u>COMPENSATION ON BREECH OF CONTRACT</u></p> <p>If the contractor fails to render the contracted services or contract is cancelled either on contractor's Risk & Expense (RE) or without RE or contract becomes ineffective due to default of contractor and causes loss to the EMPLOYER, contractor shall be liable to pay to the EMPLOYER a compensation for loss or inconvenience resulting for his default/defect or from the rescission of this contract. When such default/defect or rescission take place such compensation shall be in excess to the RE amount, if imposed by the competent authority. Compensation amount in terms of money shall be decided by the Employer and shall be deposited by the contractor in Government of Pakistan treasury in the currency of contract.</p>	
6.	<p><u>LIQUIDATED DAMAGES</u></p> <p>Liquidated damages, if imposed, will be recovered upto maximum of 2% and not less than 1% (depending on the merit of the case as decided by Competent Purchase Officer) of the value of stores/supplied/completed late per month or a part of a month for the period exceeding the original delivery/completion period, subject to the provision that the total liquidated damages thus imposed will not exceed 10% of the total value excluding taxes/duties for the project.</p>	
7.	<p><u>RISK & EXPENSE (R/E)</u></p> <p>a. In the event of failure on the part of the supplier to comply with the contractual obligations, the contract is liable to be cancelled at the risk and expense of the Contractor in accordance with DPP&I-35 (Revised 2024).</p>	

	<p>b. The employer shall be entitled to complete the project from elsewhere. In such a case the price difference (if any over and above the Net value of this contract) will be paid by Contractor as a compensation i.e. Risk Purchase amount.</p>	
8.	<p><u>TIMEFRAME OF THE CONTRACT</u></p> <p>The dredging of Ormara channel and Basin shall be completed within following timeline:</p> <p style="padding-left: 40px;">a. Maintenance dredging of existing channel and basin is to be completed within 6 + 2 months (2 months for mobilization) after CED (T0).</p> <p style="padding-left: 40px;">b. Capital dredging of new basin is to be completed within 10 +2 months (2 months for mobilization) after CED (T0).</p>	
9.	<p><u>INDEMNITY</u></p> <p>Employer and Contractor shall indemnify each other against all claims arising in respect of injury to or death of any of their employees or any other person directly or indirectly employed for the performance of required works. However, such indemnity shall not apply to the extent that such injury or death is due to the negligence of person concerned.</p>	
10	<p><u>PRICE VARIATION</u></p> <p>Prices in the dredging services of this contract are firm and final. No price variation is allowed for this contract.</p>	
11.	<p><u>CONTRACT EFFECTIVE DATE (CED)</u></p> <p>Contract Effective Date shall be the date of signing of contract by the contractor and Employer (DP (N)). CED will establish:</p> <p style="padding-left: 40px;">a. Signing of contract by both parties.</p> <p style="padding-left: 40px;">b. Endorsement by FA (Navy).</p>	

12. **GENERAL PROVISIONS OF CONTRACT**

- a. All works will be carried out under supervision of the Engineer (NHM Ormara) or his representative. Contractor is to provide all boarding and lodging requirement to Engineer (NHM Ormara) or his representative during dredging and surveys.
- b. Pre-Dredge/ IN, 05 x Interim and Post dredging/OUT surveys will be carried out jointly, employing the craft, personnel and equipment of the **Contractor**. Where the firm/ contractor will bring along its survey vessel and associated equipment. Purchase shall have no obligation associated with any damage to his survey vessel or equipment. In case firm/ contractor has hired the services from any sub-contractor. Contractor will provide all the details of sub-contractor.
- c. Within 10 calendar days of the CED, the Contractor shall submit detailed time schedules, dredging programmes, arrangements and equipment details and labour /crew details and schedules for works to the Engineer NHM (O) for checking and approval. All schedules are to be adjusted from time to time according to the actual progress of the dredging works with the definite condition that the final contractual completion date will remain unchanged unless extension of time is awarded / approved by Employer.
- d. The Contractor shall employ sufficient competent members of his staff and assets/arrangements in order to ensure the continuity of dredging works to entire satisfaction of the NHO.
- e. The Contractor shall not employ any crew or staff from India, Israel or hostile country.
- f. If contractor requires any changes w.r.t Subcontracting / subletting after the signing of the contract, then it can only be done with the consent of the Employer. However, the project completion period shall remain the same as per contract. Further, Employer shall not be responsible for any dispute arising between the contractor and his sub-contractor(s) including any claims lodged by sub-contractor(s) etc.
- g. Employer has the right to cancel the bid evaluation of a bidder or contractual proceedings/ contract (without any justification) if the provided information for bidding is found incorrect.



h. Relevant parts/ clauses of all Appendices of Annex A and B will be made part of contract.

13. **AWARD OF CONTRACT**

a. Failure of the successful Firm to fulfill the requirements stipulated in this tender shall be just cause for the annulment of the award and in the event of such annulment, the Earnest money of the successful Firm shall be retained and will become payable to the Employer. The award then may be made to another Firm or the Employer may call for fresh tenders.

b. Pakistan Navy may opt to conclude the contract for either one section of the dredging (maintenance or capital dredging) or for combined services of both maintenance and capital dredging.

c. The Employer reserves the absolute right to reject any or all tenders as per PPRA rule 33. The Employer will assume no responsibility of possible claims arising out or in connection with Tendering costs, selection of a Contractor or any other matter relevant to the Tender.

14. **DISPUTES & ARBITRATION**

a. To resolve any dispute between the two parties (Employer and Contractor) an "Arbitration" Clause will be included in the contract as follows:

1. Parties shall make their attempt to settle all disputes arising under this contract through friendly discussions in good faith. In the event that either party shall perceive such friendly discussion to be making insufficient progress towards settlement of dispute(s) at any time, then such party may give written notice to the other party to refer the dispute(s) to final and binding arbitration as provided below:

(a) The dispute shall be referred for adjudication to two arbitrators one to be nominated by each party, who before entering upon the reference shall appoint an umpire by mutual agreement, and if they do not agree a judge of the superior court shall be requested to appoint the umpire. The arbitration proceedings shall be held in Pakistan and under Pakistani Laws.

	<p>b. The venue of the arbitration shall be the place from where the contract is issued or such other places as the Employer at his discretion may determine.</p> <p>c. The arbitration award shall be firm and final and binding on both the parties to the contract.</p> <p>d. In course of arbitration, the contract shall continuously be executed except that part which is under arbitration.</p> <p>e. All proceedings under this clause shall be conducted in English language and in writing.</p>	
<p>15.</p>	<p><u>COURT OF JURISDICTION</u></p> <p>All disputes arising in connection with the contract shall be sorted out through mutual discussion. Unsettled issues may however be dealt with under the Laws of Pakistan. The Courts at Islamabad shall be the Courts of Jurisdiction for any dispute relating to contract of this indent for adjudication.</p>	
<p>16.</p>	<p><u>CONTRACT MODALITIES</u></p> <p>a. During the currency of the contract, the Contractor shall do his best endeavours to complete the contract as per laid down schedule.</p> <p>b. The tender will be processed on <u>open tendering basis</u>. Bidding quotes shall include detail of dredging plants, dredge material transport facility (s), survey platform and survey equipment. The bidders may include all costs of all taxes, mobilization, demobilization, fuel cost, all duties consumable stores, overhead charges, profit, maintenance, servicing and all other costs expenses and charges etc.</p> <p>c. No separate payment of any sort will be provided to contractor other than contracted amount.</p>	
<p>17.</p>	<p><u>CERTIFICATE REQUIREMENT FROM BIDDERS</u></p> <p>a. The bidders are required to furnish following certificates and/or</p>	

documents of conformity to be eligible to bid for the dredging contract:

1. The dredging service firm and JV partner shall provide necessary certifications as per Federal Govt. or Provincial Governments or Local Govt. or Autonomous / Semi-Autonomous bodies controlled by Federal Govt. or Local Authorities or under PPRA Rules in order to undertake contract in the field of specialization.
2. The Contractor's certificate for conformance of 100% indent specifications and and/or any deviation to be clearly indicated in the offer will be provided at the time of bidding.
3. An affidavit to the effect of following:
 - a. That all documents / particulars information given with the bid are true.
 - b. That the bidder has never indulged in corrupt, fraudulent or collusive practice for procuring contracts.
 - c. That the bidder including sub-contractor(s) (if any) is not presently involved nor has been in the past five years in litigation except those which are mentioned in bidding document.
 - d. That the Bidder has indicated and provided detail about all the dredging projects which got delayed by contractor or his sub-contractor (s) during last 3 years.
 - e. That the Bidder and his sub-contractor (s) (if any) have never been black-listed by Federal Govt. or Provincial Governments or Local Govt. or Autonomous / Semi-Autonomous bodies controlled by Federal Govt. or Local Authorities or under PPRA Rules.
 - f. That the Bidder shall employ suitable power and capacity dredgers (not older than 20 years) to ensure completion of dredging work (including surveys) in **stipulated timeline**. In case of poor performance, the contractor shall bring **additional dredging platforms** to complete the work as per the contract schedule at contractor's cost.
 - g. That the Bidder and his sub-contractor (s) (if any) will not employ any crew or staff from India and Israel or hostile country at Naval Harbour.

h. That the Bidder must employ key personnel relevant to survey and dredging field.

18. **FINANCIAL PROPOSAL**

a. The bidder/ supplier should include the price of all deliverables/ services (i.e Mobilization, De-Mobilization, Surveys (IN/OUT and interim), dredging including all taxes & Duties). Per cubic meter cost w.r.t dredging services be separately mentioned in financial quote.

b. The prices in the Bill of Quantities (**Sample is at Appendix III to Annex B**) shall be the full inclusive value of the work including all costs and expenses which may be required in the whole dredging project described together with all liabilities and obligations set forth or implied in the Contract. Where an item is left unpriced, it will be held that the Bidder has made due allowance for this in the rates and prices entered against other items. No claim for additional payment shall be allowed for any error or misunderstanding by the Contractor of the work involved.

c. The rates and prices shall include, but not be limited to, the provision and operation of the following items, for compliance with the Conditions of the Contract and the Drawings:

1. All plant, vessel and equipment.

2. All labour/crew, including supervision.

3. All Contractor's accommodation, site offices, cabins, huts, maintenance workshops and storage facilities.

4. All necessary temporary services including fresh water, compressed air lines, electrical cabling and switchgear, telephone, walkie-talkie and facsimile facilities.

5. All temporary fencing, watching, lighting, sanitary accommodation, general security arrangements, welfare facilities and first aid provision.

6. All safety equipment (including safety boat).
7. All maintenance, security and welfare facilities.
8. All materials, including handling and transportation, installation/ erection, testing and commissioning.
9. All temporary works.
10. All navigation markers, buoys and lighting.
11. Working by day and night as is customary for this type of work.
12. All supervision and management.
13. The protection from damage and making good any damage to existing services of any description.
14. The protection of existing port markers, buoys and lights.
15. Any delay due to weather and sea state or any delay not authorized by the Employer.
16. Obtaining of any necessary licenses.
17. All taxes and duties including Sales Tax, General Tax, Import Duty, Customs Duty, etc.
18. All overheads and profit and every incidental and contingent costs and charges whatsoever.

19. Allowance for complying with all environmental requirements.

NOTE: These items above shall include all associated mobilization, maintenance, de-mobilization and all necessary resources.

19. **SAFETY MEASURES**

- a. The Contractor is to aware himself that Naval ships/ craft will use the channel and basin during the period of the dredging work. The Contractor's dredger, ancillary craft and related buoys/ pipes shall not hinder the movement of these vessels. Any claim received on account of hindrance of traffic by Employer or from any agency due to Contractor's negligence shall be the liability of Contractor and the same will be settled by the contractor at his own arrangement and cost.
- b. To prevent collision of dredger in operation with other craft, infrastructure working lights/ anchor lights and shapes shall be installed/ provided and maintained by the contractor at night/day time to meet safety requirements as per International Rules of the Road and local port regulations. It will be the Contractor's exclusive responsibility to ensure that all movements are to be duly reported to NHM (O) well before time over radio network maintained by ONH harbour authorities.
- c. The Contractor shall provide and maintain work environment and procedures, which will safeguard the public and Employer personnel, supplies, and equipment exposed to Contractor's operations and activities. *Any damage to roads, jetties or underwater supporting infrastructure caused by contractor operation will be settled by the contractor at his own arrangement and cost.*

20. **SECURITY CLEARANCE**

a. Potential bidding firm or in case of sub-contractor, lead firm has to take own and sub-contractor'(s) (if any) security clearance certificate or NOC from **Naval Intelligence department (FSO(K))**. Depending upon situation, the Employer may extend NOC submission date. Employer has the right to cancel the contractual proceedings/ contract (without any justification) with the firm and or sub-contractor(s) found security wise unsuitable with special regards to the sensitivity of the area/base. Contractor shall submit consolidate list of his staff/HR to NHO for security clearance formalities upon successful bidding.

b. Contractor may engage **local sub-contractor(s)** for timely execution of the project subject to prior permission of the Employer.

	<p>c. The Contractor shall obtain (7 days) in advance the Employer's consent on general arrangements and equipment (along with full details of dredging plant, crew detail including CNIC/Passport, nationality, security clearance) to be employed for the work.</p> <p>d. Any person indicated by Employer as security wise not cleared shall be removed / replaced.</p>	
21.	<p><u>SITE INFORMATION</u></p> <p>a. As the project is related to capital & maintenance dredging, no new site strata details or SPT values will be provided by the Employer. However, the Contractor's attention is drawn to the held site investigation information (which covers complete dredging area) provided in the indent at as Appendix V to Annex A. Notwithstanding, contractor may carry out site investigation/boreholes under this Contract at his cost and risk and without any obligation on Employer.</p> <p>b. The Contractor will be deemed to have familiarised himself at his own with all the information, with all relevant Charts and tidal information relating to the site and with the prevailing weather, wave, current conditions and sediment transportation experienced in the area.</p> <p>c. Notwithstanding any statements, recommendations or conclusions made in the relevant reports, the Contractor is solely responsible for assessing all data and carrying out his own interpretations.</p>	
22.	<p><u>SERVICES PROVIDED BY EMPLOYER</u></p> <p>PN on behalf of Employer may consider provision of following services to the Contractor upon availability:</p> <p>a. Basic crane facilities. b. Berthing as per decision of NHM (O).</p>	
23.	<p><u>FOSSILS/COINS/ARTICLES OF VALUE OR ANTIQUITY</u></p>	

Fossils/coins/articles of value or antiquity and structures and other remains or things of geological or archaeological interest discovered on the site be deemed to be the absolute property of the Employer and the Contractor shall take such reasonable precautions to prevent his workmen or any other persons from removing or damaging any such article or thing and shall immediately upon discovery thereof and before removal, acquaint the Engineer of such discovery and carry out at the Engineer instructions.

24. **INTEGRITY PACT**

This contract exceeding the price limit is required to be supported by integrity pact as format at **Appendix I to Annex B** which is to be signed by Employer and Contractor at the time of signing of contract.

25. **OBLIGATIONS**

- a. The Contractor or Sub Contractor(s) shall provide all necessary types of dredging plant, survey platform and ancillary equipment suitable for the execution of the Works. The Contractor shall provide full details of the principal equipment/plant proposed in the List of Equipment, attached with his Bid, explaining how the equipment will be utilized.
- b. The Contractor shall further be responsible for any changes in plant to satisfy any variation in the site conditions, which shall be done with prior approval and without any extension to the programme of works or to the budget **and with no cost to the Employer.**
- c. The contractor shall select type of Dredging Plant to be employed with due consideration to the soil conditions, hydraulic conditions and disposal conditions etc, at the site and **no liability shall rest upon the Employer** in any respect with regard to the accuracy of the information given on these items in the specification.
- d. If at any time during the currency of the Contract, the Contractor should be unable to provide the dredgers and ancillary equipment named in the List of Equipment, the Contractor shall without delay provide another dredger(s) to undertake the dredging work. The replacement dredger or ancillary equipment must not, in the opinion of the Employer's rep, be inferior to the named dredger in either size, capacity, robustness, condition of repair or horsepower. This replacement dredger shall have the specific written approval of the Employer.
- e. Any delay to the completion of the Contract, caused by a delay in the Contractor providing an approved replacement dredgers under this Sub-Clause will not entitle the

Contractor to an extension of time under the relevant clause in the Conditions of Contract

- f. Dredging and material transporting equipment shall be fitted with a real time track plotting or other recording device, capable of providing and storing the location and plots of the vessels position during dredging and disposal/ dumping.
- g. The Contractor shall ensure that the closing faces of all split barges/ dredgers and the doors and chains of hopper barges, pipes flanges/ connectors/ joints used to convey dredged material are in good condition and that their closing faces/ doors / flanges are kept closed when the barges/dredgers are in the dredging area or are conveying such material to the disposal site, so that no spillage or leakage of material results from the hopper/barges or pipes..
- h. No dumping of dredged material shall be carried out outside the designated on shore or off shore dumping site. Survey of the offshore designated dumping site (if required/used by contractor) will be carried out jointly during IN and OUT survey phase of project to monitor and confirm this practice
- j. Dredging shall be carried out as per specification and tolerance highlighted in **Annex – A and its Appendix I**. Anything found to be outside the specified tolerances, re-dredging or filling with approved material as appropriate shall be carried out at the Contractor's own expense. However, filling will be done with the consent of Employer.
- k. The Contractor shall observe all national shipping and navigation codes and regulations.
- ax. The Contractor's or his Sub Contractor's dredging vessels shall not cause any damage or disruption to the bottom infrastructure, services adjacent roads, piers, jetties on the seabed or passing across the navigable channels, wharves, piers etc, and they shall abide by all regulations and conditions imposed by the services agencies. Any damage or claim shall be settled by the Contractor.
- all. Floating/ dredging plants shall display appropriate day and night signals, and the Contractor shall ensure that a look-out is kept at all times.
- n. Existing buoys and beacons must not be damaged during dredging operation. Any damage to these shall immediately be reported to the Employer's rep/NHM (Ormara), who will issue instructions about making good the damage, which shall be at the Contractor's own cost. However, buoys may be relocated to facilitate dredging operation prior dredging **at contractor's expense**.

p. The Contractor shall be held responsible for any damage or injury to shipping or craft of whatever description which may occur during the execution of the Contract through any act or omission or default of the Contractor or of any person in his employ or for whom he is responsible,

q. The Contractor or his sub-contractor (s) shall employ at least following Key Staff/Alternate Candidates having minimum of 5 years experience in relevant fields:

1. Project Manager
2. Dredging Superintend / Dredging Master
3. Chief Hydrographer / Hydrographer
4. Captain/Master Mariner
5. Geotech/ Sub soil Engineer

26. SUBLETTING/ USE OF SUB-CONTRACTORS

a. The Contractor shall be entirely responsible for the execution of the contract in all respects according to the terms of the contract. The Contractor shall not sublet, transfer or assign the contract or any part thereof to any other firm/party without prior written permission of the Employer.

b. The Contractor shall be responsible for all Sub-Contractors and he shall ensure that their labour and equipment is in keeping with the high standards required.

c. In addition to his responsibilities for the supervision and administration of all sub-contracts allowed in accordance within the Conditions of Contract the Contractor shall arrange a programme with each Subcontractor for the execution of specialist work to permit the Works to be completed within the stipulated time. Any such programme shall be subject to the approval of the Engineer / Engineer'S Representative.

d. The Contractor shall allow Subcontractors sufficient space and appropriate accommodation for the storage of materials and fabrication of work prior to fixing. The Contractor shall be responsible for the safe custody and condition of articles and goods provided by any specialist Subcontractor or supplier.

e. The contractor shall be responsible for all payment/ liability (if any) of ~~the~~ sub-contractors.

27. FORCE MAJEURE

a. The parties shall not be held responsible for any delay occurring in supply

equipment due to event of Force Majeure such as of God, War, Civil communication Strike, Lockouts, pandemic Act of Foreign/local Government and its agencies and disturbance directly affecting the parties over which events or circumstances the parties evoking has no control. In such an event the Supplier shall inform the EMPLOYER within 15 days of the happening and within the same timeframe about the discontinuation of such circumstances/happening in writing. Non-availability of raw material for provision of dredging services, or of export permit for the equipment in use for provision of dredging services from the country of its origin, shall not constitute Force Majeure.

b. The Supplier shall use his best effort to avoid or remove such circumstances and continue fulfilment of obligations as soon as such circumstances removed/over.

c. If by reason of Force Majeure full or part of the dredging services is not delivered by the due date then the EMPLOYER may adopt following options with the prior approval of competent authority with or without notifying the Supplier.

(1) The delivery period may be extended appropriately for the Force Majeure duration as established.

(2) In case of indefinite duration of Force Majeure where the EMPLOYER is satisfied that contract is not likely to materialize may cancel the contract in consultation with NHQs without financial implications and contractual obligations on either side.

(3) In case advance/down payment(s) has been made to the Supplier then recovery of such amount must be ensured by the procurement.

d. Agency either through encashment of BG(s) or reimbursement by the Supplier before cancellation of the contract.

28.

FAILURE/ TERMINATION

a. The Employer is entitled to terminate this Contract fully or partly if the Contractor commits a substantial breach of its obligations under the terms of this contract and fails to commence remedial actions within 15 (fifteen) days after receipt of written notice thereof from the Employer's rep/Engineer (NHM Ormara).

b. The Employer is entitled to terminate this Contract fully or partly in any of the

following events with prior notice:

(1) Insolvency, bankruptcy, dissolution or liquidation of the Contractor's failure to comply with his obligations according to Clause of Guarantees.

(2) Substantial delay in handing over of dredged area as per the stipulated schedule of the contract (excluding substantial delay period). Substantial delay period shall have maximum limit of 4 weeks other than the grace period of two weeks. However, LD shall be applicable in the substantial delay period.

c. If the Employer terminates this Contract fully or partly according to above said reasons, the Contractor shall refund the payments according to dredging work completed till termination. The same will be determined by joint survey. If contractor, doesn't respond to joint survey call within 7 days of termination notice, the Employer solely shall undertake the surveys with own equipment and shall determine the payment for the work done by the contractor

d. If at any time during the currency of the contract, Employer decides to terminate the contract for any reason whatsoever (other than for reasons of non-delivery) he shall have right to do so by giving the contractor a registered notice to that effect. Should the Contractor fail to initiate proceedings in order to comply with the notice within 15 days from the date of serving of such notice, the Employer may forthwith terminate this Contract by notice in writing to the Contractor without prejudice to any rights of Contractor. However, if contractor completes the work after the notice within stipulated time, extra cost (if any) incurred on dredging works shall be on Contractor's account.

e. Should the contractor fail to deliver dredging services in time as per terms of contract or fail to render Bank Guarantee within the stipulated time period or any breach of the contract the Employer reserves the right to terminate/cancel the contract fully or any part thereof at the risk and expense (RE) of the contractor.

f. Within 10 (ten) calendar days, following the date on which the termination has

become effective, the Parties shall mutually agree in writing for the dredging work which is completed or partially completed,

29. FRAUD AND CORRUPTION

Offer or give or agree to give to any person in the service of the supplier any gift or consideration of any kind as an inducement or reward for doing or forbearing to do for having done or forborne to do any act in relation to the obtaining or execution of this Contract or for showing or forbearing to show favor or disfavor to any person in relation to this Contract. Enter into this or any other Contract with the supplier in connection with which commission has been or agreed to be paid by him or on his behalf, or to his knowledge, unless before the Contract is made, particulars of any such commission and of any agreement for the payment therein have been disclosed in writing to the supplier. Any breach of this clause by the Contractor or by anyone employed by him or acting on his behalf (whether with or without the knowledge of the Contractor) in relation to this contract shall entitle the supplier to recover from the Contractor the amount of any loss resulting from the breach of this clause. The Contractor certifies that no Agents commission or payments of this kind have been or will be made to any Party on account of this contract by the Contractor.

30. SECRECY/ NON DISCLOSURE AGREEMENT (NDA)

a. The Purchaser and the Contractor undertake and agree to exercise their best efforts to prevent any unauthorized person(s) from gaining access to drawing offices or workshops or other premises where the supplies are being designed, manufactured, constructed, stored and/or outfitted.

b. As the Contractor and its Sub-Contractor(s) are the exclusive owners of the intellectual property rights/ copy rights and industrial rights of any and all contractual designs, data, software, TDP, drawings etc., and since they possess all relevant rights therein, the Purchaser and the Contractor undertake and agree to prevent such designs, data, software, drawings, TDP, etc. as well as copies thereof from falling into the hands of representatives of any other foreign power or competitor of the Contractor or its Sub-Contractor(s) and Purchaser or any other unauthorized Party or person.

c. The above provisions shall, however, not be construed as any restriction whatsoever of the Purchaser's/ Shipyard's application and use of such drawings and TDP for any purpose in accordance with this Contract.

d. The secrecy obligations above are supplementary to those contained in any agreement between the Pakistan Navy on behalf of the Purchaser, whereby the obligations pursuant to above shall be subject to the Pakistan law regarding the custody and protection of classified matter.

e. It is the Contractor's responsibility to ensure that all such information is protected in accordance with the protective markings assigned by the Purchaser. If in any case this become essential with regards to this Contract to disclose the information classified as Confidential or above to Sub-Contractors (OEMs), approval must be sought from the Purchaser.

f. The Contractor undertakes to prevent any unauthorized visits to the platform(s) being constructed/ upgraded, and/or systems/equipment being manufactured / developed for the Purchaser to ensure confidentiality of the information concerning this project. No unauthorized Party or person may be allowed onboard during its construction/ upgrade and qualification tests.

	<p>g. The terms of this Contract are 'CONFIDENTIAL' and each Party agrees not to disclose them to any Third Party except as may be necessary for the performance of this Contract which includes its professional advisors and as else may be required.</p> <p>h. The Contractor undertakes as per Annex-F that any information about the sale/purchase of the goods / stores under this contract shall not be communicated to any person/organization / agency, other than the manufacturer of the stores/ equipment/ material, or to any press or agency not authorized by the Purchaser to receive it. Any breach on this account will be punishable under Official Secrets Act-1923 of Pakistan and may lead to legal action against the Contractor in addition to termination of the contract at the risk and expense of the Contractor.</p> <p>j. Non-disclosure agreement is at Appendix IV to Annex B and shall be signed by the successful bidding firms.</p>	
31.	<p><u>LIST OF MAJOR EQUIPMENT – RELATED ITEMS</u></p> <p>1. The Bidder shall provide a list of all major equipment and related items, under separate heading for items owned, to be purchased or to be arranged on lease by him to carry out the Works. The information shall include make, type, capacity, and anticipated period of utilization for all equipment which shall be in sufficient detail to demonstrate fully that the equipment will meet all requirements of the Specifications.</p> <p>2. The general detail of all dredging and survey equipment is to be given in the form of table at Appendix V to Annex B, where as individual detail of dredger/ equipment/ gear/ plant/ barges/ boats shall be provided by the contractor using sample form at Appendix V to Annex B.</p>	
32.	<p><u>COMPLETION OF LOGS FOR EMPLOYER</u></p> <p>The Contractor shall be responsible for completing records of all plant and materials on site, in order to fully satisfy the employer, who may inspect the Works at any time. The Contractor shall complete the records in a book provided by the Employer. The Contractor shall maintain the records daily, and shall make this available for inspection and signing by the Engineer at weekly intervals. The schedules are to be completed by the Contractor on a daily basis and submitted to the Engineer within 24 hours for checking and approval. These records will assist in the measurement and payment for the Works and must be available for examination by any technical examiner or auditor. The records shall contain information on the following, in a format to be agreed with the Employer:</p> <ul style="list-style-type: none"> (a) Daily work log (with proper time log for commencement and stoppage of work). (b) Maintenance log (downtime due to machinery breakdowns). (c) Wastage. (d) Equipment/ Plant / Barges/ Vehicles used. (e) Labour (Skilled or unskilled) used. 	
33.	<p><u>BIDDING PROCEDURE</u></p> <p>The tender shall be floated on Open Tendering Basis using Single Stage Two Envelope Bidding procedure.</p>	

	<p>The tender shall be floated on Open Tendering Basis using Single Stage Two Envelope Bidding procedure.</p>	
<p>34.</p>	<p><u>AMENDMENT IN CONTRACT</u></p> <p>Amendment in the contract if required shall be processed by Purchaser upon mutual agreement of both parties i.e. Purchaser & Supplier and formally issued through amendment in the contract/corrigendum.</p>	
<p>35.</p>	<p><u>AUDITED FINANCIAL STATEMENT</u></p> <p>Firm is to provide audited financial statement of last 3 to 5 years.</p>	
<p>36.</p>	<p><u>PREVIOUS DREDGING CONTRACTS</u></p> <p>Firm is to provide details of dredging projects conducted during last 3-5 years alongwith stipulated timeline.</p>	





Fig - 3 East Wharf Improvement Works

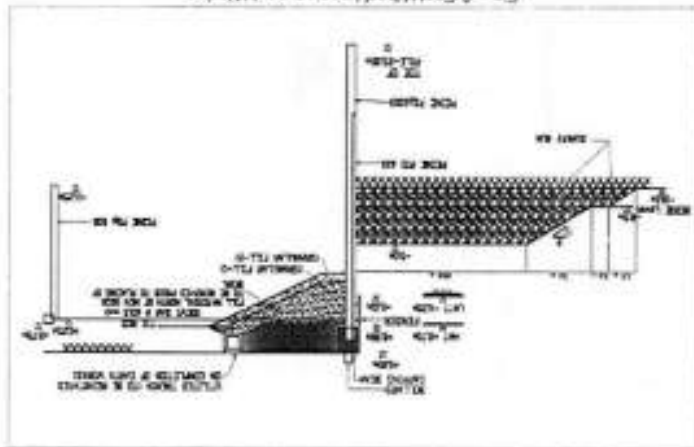


Fig - 2 South Wharf Improvement Works

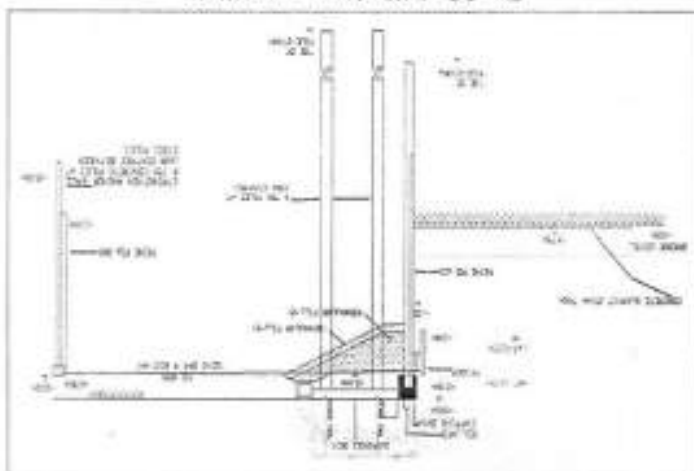




Fig - 1a Capital Dredging site New Basin area

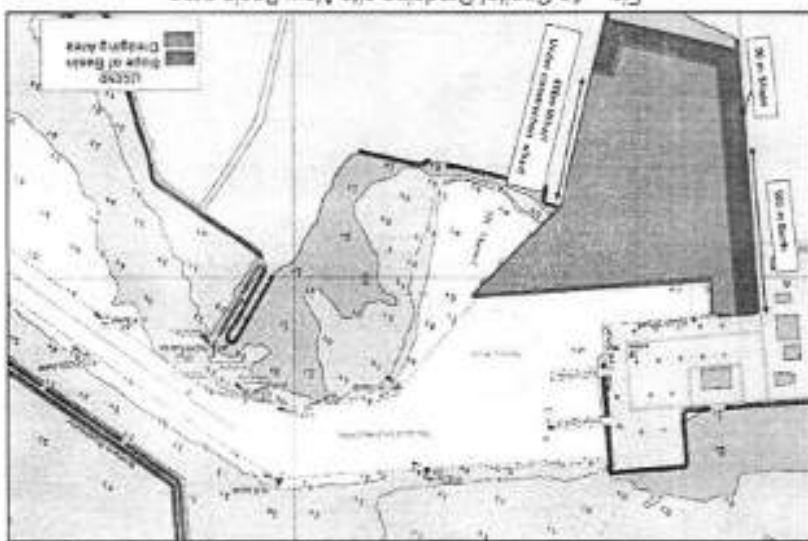
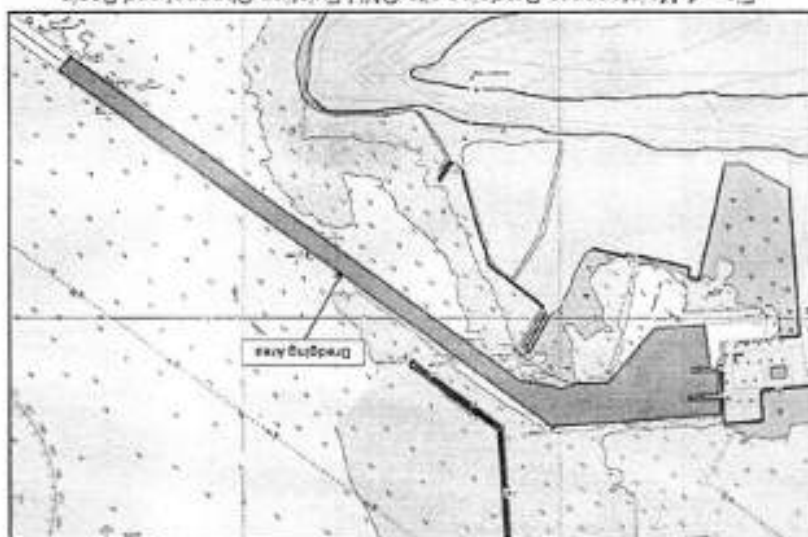


Fig - 1 Maintenance Dredging site ONH Existing Channel and Basin



OVERVIEW/ COORDINATES OF SURVEY/ REDGE AREAS - IN/ OUT/ INTERIM SURVEYS

APPENDIX I TO ANNEX - A

① X

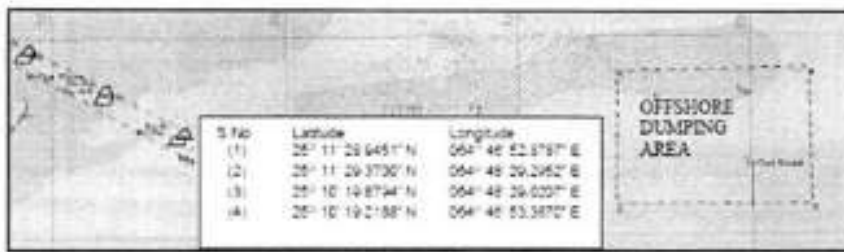


Fig - 4 Disposal Site-1 Layout

a. **COORDINATES OF DISPOSAL SITE-1**

S No	Latitude	Longitude
(1)	25 ^o 11' 28.9451" N	064 ^o 48' 52.8787" E
(2)	25 ^o 11' 29.3700" N	064 ^o 48' 29.2952" E
(3)	25 ^o 10' 19.8794" N	064 ^o 48' 29.0207" E
(4)	25 ^o 10' 19.2168" N	064 ^o 48' 53.3670" E

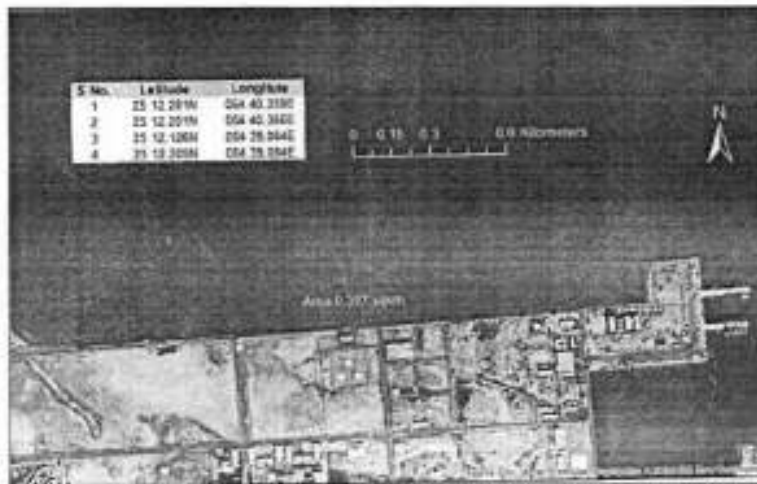


Fig - 5 Disposal Site-2 Layout

b. **COORDINATES OF DISPOSAL SITE-2**

S No.	Latitude	Longitude
(1)	25 ^o 12 28' N	064 ^o 40 39' E
(2)	25 ^o 12 20' N	064 ^o 40 36' E
(3)	25 ^o 12 12' N	064 ^o 39 08' E
(4)	25 ^o 12 20' N	064 ^o 39 08' E



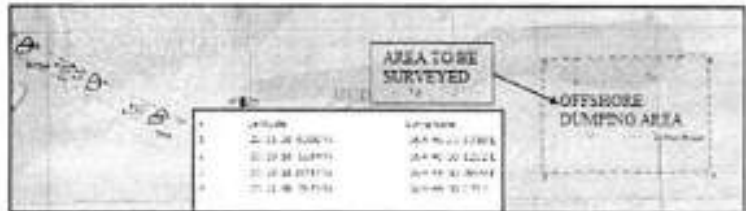


Fig - 6 Survey coordinates offshore dumping area

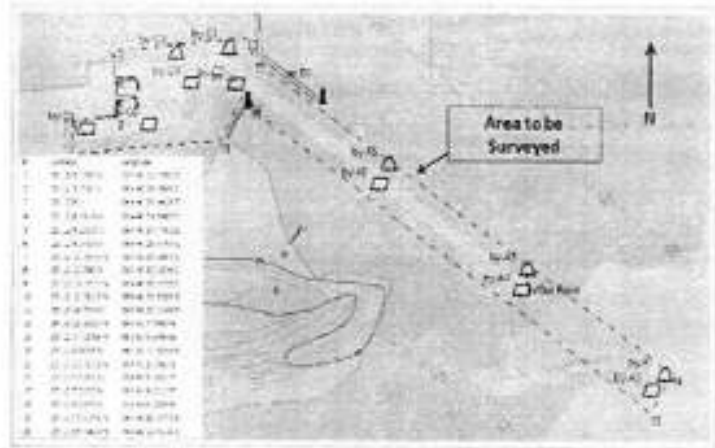


Fig - 7 Survey coordinates



DREDGING GUIDELINES

GENERAL

1. Conditions of Contract preceding these technical specifications contain provisions and requirements, essential to these specifications; and apply to this Section, whether or not referred to herein.

SCOPE OF CAPITAL DREDGING

2. The drawings highlighted at **Appendix I to Annex A** define the extent of dredging and areas to be dredged and the dumping/ disposal areas. This section includes dredging of basin area for capital dredging.
3. For the dredging area, the dredging profile is the surface defined by the lines, levels and slopes shown on the Drawings at **Fig-1 & 1a of Appendix I to Annex A**, above which no seabed material regardless of type or nature protrudes at the time of the final/OUT survey under the contract, should exist.

SITE INFORMATION

4. Capital and maintenance dredging project requires no additional site investigation or SPT values determination by the Employer. However, the Contractor's attention is drawn to the site condition information referred in the Contract and the requirements herein to carry out additional site investigation surveys if desired under this Contract **without any obligation on Employer.**
5. The Contractor will be deemed to have familiarised himself at his own with all the information, with all relevant publications and Charts including tidal information relating to the site, weather, wave, current conditions and sediment transportation prevailing in the area.
6. The Contractor shall make his own assessment of the quality and nature of the materials to be dredged and employ the **most suitable dredging plant** (dredger) to achieve the required depth profiles in the stipulated time. No liability shall rest upon the Employer and the Engineer NHM(O) in any respect, with regard to the accuracy of the information given on these items in the specifications.
7. Notwithstanding any statements, recommendations or conclusions mentioned above, the Contractor is solely responsible

for assessing all data and carrying out his own interpretations.

GENERAL PROVISIONS

8. Except where otherwise permitted by Employer, all works shall be carried out under the supervision of the Engineer/ Employer representative.
9. The Contractor shall obtain in advance the Employer's approval on general arrangements and equipment to be employed for the Works.
10. Naval ships crafts and other PN Dredgers will use the channel and basin during the period of the dredging works. The Contractor's dredgers and their ancillary craft and related buoys **shall not** hinder the movement of PN vessels. However, movement of PN vessels will be generally intimated /coordinated by NHM (Ormara).
11. To prevent collision of dredger in operation with other ships/ crafts; working lights, anchor lights, shapes or buoys where applicable shall be installed/ provided and maintained by the Contractor at night time and during day time to meet safety requirements as per International rules.
12. In case, the Contractor use dredging plant(s)/ dredger(s) whose stationing/ positioning require dropping of anchors in its vicinity, the contractor shall ensure that these anchors do not become Navigational Hazard and are duly marked for day and night.

METHOD OF DREDGING

13. The method of dredging shall be to the approval of the Dy HoP and the area shall be dredged to the designed depths, width and slopes shown on the Drawings or as may be directed. Best practice shall be employed to reduce the loss or re-suspension of fines arising from dredging and placement operations. For dredging materials, the Contractor shall use his best endeavors to fully utilize the capabilities of the dredging equipment. This will include multiple passes and repositioning of the dredger to maximize its productive capabilities. In case dredging is not being executed as per approved plans, Engineer / Engineer's Representative may instruct to stop such dredging and no payment will be made for this type of dredging, nor any other matters arising as a consequence of such instruction to stop. The Contractor shall immediately rectify the dredging works and methods, for approval by Dy HoP before recommencing. Any delay to the completion of the Contract caused by an instruction under this Sub-Clause will not entitle the Contractor to an extension of time under the relevant clause in the Conditions of Contract.

SIDE SLOPES

14. Where side slopes have to be formed as part of the Works, they shall be executed to the lines and levels shown on the Drawings and tolerances given in the Specification. The Contractor shall be fully responsible for ensuring that his method of forming the slopes does not result in any instability either in the short or long term. The Contractor shall submit his proposals for forming the side slopes to the Dy. HoP for approval.

OBSTRUCTIONS INCLUDING MUNITIONS

15. No guarantee is given that the dredging areas are free from underwater obstructions, mines, explosives or other relics of past wars. Non-geological materials only will be regarded as obstructions. The removal of obstructions by normal dredging will not be paid for. The Contractor's price shall be deemed to include the cost of locating underwater structures, installations, or obstructions that may exist in the areas where dredging operations are to take place. The price shall also include all costs involved in taking every precautionary measure to avoid damage to any underwater installation, such as pipelines, cables, sewerage or drainage pipes etc. The Employer shall not be held responsible for any damage to underwater installations due to the Contractor's failure to take the necessary measures or precautions, or for any damage to the Contractor's plant and equipment due to any underwater obstruction.

DREDGING IN HARD MATERIAL

16. Where dredging is necessary in hard material, the Contractor's attention is drawn to the ground conditions information provided separately and that he shall form, from his own experience, opinion and interpretation of the character of the materials to be dredged and he will be entirely responsible for choosing and providing suitable plant and equipment of adequate capacity / power, capable for the proper execution of the dredging works. If the contractor desires to carry out additional testing, he may do so at his own cost prior to tendering.

17. Notwithstanding any information provided in these specifications, the contractor's cost per cubic meter (rates) for dredging work shall include the cost of dredging, removal and disposal of all types of materials.

DREDGING PARAMETERS AND TOLERANCES

17. Where the final surface of dredging is found to be outside the specified tolerances (regardless of the reasons), re-dredging or filling with approved material as appropriate shall be carried out at the Contractor's own expense unless specifically directed otherwise.

18. The total quantity payable is the 9m for existing channel/ basin and depth of 10m for new basin area alongwith slopes defined in this contract. Non-payable quantities are:

a. Any dredging below the design level.

b. Any un-authorized dredging.

19. Any siltation in the dredging area between IN and OUT surveys during course of capital dredging works and upto the end of dredging works will be on dredging contractor's account and no additional payments in this regard will be made.

20. In case there are high spots above design level, the Contractor will remove these spots prior demobilization of his assets. Removal of high spots will be determined by OUT Survey of that limited area.

POSITIONING FOR DREDGING WORKS

21. The contractor shall arrange, provide and maintain his own electronic positioning/ charting system giving the position accuracy not less than 2 meters (2 Sigma Value) as per Accuracy Standard to cover the entire areas of the site for Dredging and for positioning of the dredger during the period of dredging works.

DUMPING AREAS

22. The dredged material shall be transported by the contractor to and placed in the dumping areas or site designated by Employer for this purpose. No dumping shall be done outside the prescribed areas and sites as under:

a. **Dumping Site-1.** Area coordinates of dumping site are as under:

S No	Latitude	Longitude
1.	25 ^O 11' 28.9451" N	064 ^O 46' 52.8787" E
2.	25 ^O 11' 29.3700" N	064 ^O 48' 29.2952" E
3.	25 ^O 10' 19.8794" N	064 ^O 48' 29.0207" E
4.	25 ^O 10' 19.2168" N	064 ^O 46' 53.3670" E

b. **Disposal Site-2.** Area coordinates of dumping site are as under. In case contractor deploys a dredger that requires onshore dumping. However, construction and maintenance of pond, embankment at shore dumping site will be the responsibility of contractor at his own expense.

S No.	Latitude	Longitude
(1)	25 ^o 12.281' N	064 ^o 40.359' E
(2)	25 ^o 12.201' N	064 ^o 40.366' E
(3)	25 ^o 12.126' N	064 ^o 39.084' E
(4)	25 ^o 12.209' N	064 ^o 39.084' E

23. The Contractor shall submit the description of the dumping methodology along with its bidding proposal. **Any dumping method other than disposal sites will require explicit approval.**

MEASUREMENT OF DREDGING PROGRESS

24. The dredging progress will be determined through surveys mentioned below. All the references / guidelines for hydrographic survey mentioned in **Appendix IV to Annex A** are to be mutually agreed by the Contractor and Employer prior conduct of survey(s). All the surveys will be conducted jointly by the contractor and National Hydrographic Office representatives using **Contractor's** equipment and resources. However, all other surveys (side scan, single beam, multibeam and sub bottom profiling etc) for assessment of dredging works basin area, underwater restriction assessment or day to day progress monitoring shall be the Contractor responsibility and use his own equipment and resources.

a. **Pre dredge/ IN Survey.** This will be conducted using Single Beam Echo sounding technique and will establish the start levels prior dredging.

b. **Interim Survey(s).** 05 x Interim Joint survey(s) will be required to ascertain the dredging progress for payment milestone. These will be undertaken upon completion of required milestone.

c. **Post Dredge / OUT Survey(s).** This survey(s) will be conducted jointly as per procedure of Pre dredge survey. "OUT survey(s)", will form the basis for completion of capital dredging and for handing/ taking over of Channel and basin upon

completion of dredging by contractor/ firm. In addition to Single beam bathymetric surveys, Multibeam bathymetric surveys shall be conducted by contractor after O/T survey for indication of high points between the sounding lines. Should any part of the area be found to be outside the tolerances specified, the Contractor shall re-dredge the area until the tolerances have been achieved. **No additional payment** will be made for these surveys or for any re-dredging required.

25. Out Survey(s)/ Interim surveys of the dredged area will be carried out jointly by the contractor and National Hydrographic Office (NHO) within seven working days of receipt of completion report by contractor. After joint survey, processing and report finalisation is to be completed within **07 (Seven)** working days.

CONTRACTOR'S DREDGING PLANT/ DREDGER(S) OBLIGATION

26. The Contractor shall provide all necessary types of dredging plant/ dredger(s) and ancillary equipment suitable for timely execution and completion of the works. The Contractor shall provide full detail of the principal items of plant/ dredger(s) proposed in the List of Equipment with his Bid, explaining his dredgers complete details including productivity (per/hour) and how the equipment will be utilized. **Financial proposal** shall be **inclusive of all the service charges and breakdown** of the same shall be provided in the financial proposal.
27. The Contractor shall be responsible for the selection of plant/ dredger(s) suitable for working in the ground conditions of the working site and in the prevailing weather conditions at the time of works. The Contractor shall further be responsible for any changes in dredging plant to satisfy dredging production or any variation in the site conditions, which shall be done with the prior approval of NHO and **without any extension to the programme of works** or to the **Contract Price**.
28. It is the responsibility of the Contractor to decide upon the extent and type of Dredging Plants/ dredger(s) to be employed with due consideration to the soil conditions, hydraulic conditions and disposal conditions etc, at the site and no liability shall rest upon the Employer in any respect. The Contractor shall be entirely responsible for the sufficiency of dredging plant/ dredger(s), machineries, tools and equipment used for fulfillment of the contract whether such means may or may not be recommended by the Employer.
29. The Contractor shall at all times allow the Engineer (NHM(O)) to have access to all dredging plant and ancillary equipment for the purpose of carrying out inspections.
30. If at any time during the currency of the Contract, the Contractor should be unable to provide the dredgers and ancillary equipment named in the List of Equipment, the Contractor shall without delay provide another dredger(s) to undertake the dredging work. The replacement dredger or ancillary equipment must not, in the opinion of the Employer's rep, be inferior to the named dredger in either size, capacity, robustness, condition of repair or horsepower. This replacement dredger shall have the specific written approval of the Employer.
31. Any delay to the completion of the Contract, caused by a delay in the Contractor providing an approved replacement dredgers under this Sub-Clause will not entitle the Contractor to an extension of time under the relevant clause in the Conditions of Contract.

32. All dredging and material transporting equipment shall be fitted with an approved real time track plotting or other recording device, capable of providing the location and plots of the vessels position during dredging and disposal.

SPILLAGE & SILTATION

33. The Contractor shall ensure that the closing faces of all split barges and the doors of hopper barges/ tanks or pipe lines used to transport dredged material, are in good repair and that such closing faces, doors and connecting pipes flanges are kept closed so that no spillage or leakage of material results from the dredge plant or dumping plant / equipment.
34. In case siltation of dredging areas due to dredging or dewatering operations occurs during the currency of the Contract, the Contractor shall change his method of operations to prevent further siltation. The Contractor shall also remove any such siltation from the navigable areas as soon as possible, such that the depths are restored to their value at the start of the Contract and normal vessel movements within the navigable areas are not affected.
35. Any siltation which has occurred in the surrounding areas since the initial survey shall be removed and disposed off by the Contractor at dumping site by Employer at Contractor's cost. Surveys of these areas may be instructed at intermediate times during the course of the Contract as decided by Employer. Moreover, employer representative may board contractor dredger as an observer.

NAVIGATIONAL REQUIREMENTS

36. The Contractor shall observe all national shipping and navigation codes and regulations. Dredging plant/ dredger(s) shall display appropriate day and night signals, and the Contractor shall ensure that a lookout is kept at all times. Constant liaison/ communication for movement of vessel in harbor is to be maintained with NHM(O).
37. The Contractor's dredging vessels shall not cause any damage or disruption to the services on the seabed or passing across the navigable channels and they shall abide by all regulations and conditions imposed by the services agencies. Any damage or claim shall be settled by the Contractor.
38. The Contractor shall conduct his operations so as not to obstruct the marine traffic in the area. He shall keep NHM (O) informed about all planned and on-going activities, and he shall comply with the general requirements of the Harbour Authorities regarding traffic in the area.
39. The Contractor shall cease dredging and move his dredger or other floating equipment when requested through communication circuit(s).

40. Existing buoys and beacons must not be disturbed. Any damage to these shall immediately be reported to NHM(O), who will issue instructions about making good the damage, which shall be at the Contractor's own cost. Any requirement for temporary relocation of channel/ basin buoys will be met by the Contractor at his expense with written approval of NHM(O).

ANCHORS & MOORINGS

41. All anchors/ moorings used by the Contractor shall mark the positions of anchors and any ancillary equipment with floating buoys or by other approved means. Anchor wires shall not obstruct navigable channels/ basin.

MAINTENANCE OF RECORDS

42. The Contractor shall maintain on all vessels used in the dredging operations a record written in English of the times of loading and deposition of dredged material, fuel consumption, and a note, with timing, of any occurrence or eventuality which has a significant bearing on the progress of the Contract. These records shall be available for inspection by the Employer's rep/Engineer i.e NHM(O) at all times and if required, copies of specified parts of these records shall be provided.
43. Records of the volume of material dredged and position from where it was dredged, plant used, water velocity through the suction pipes and material content, working hours, fuel consumption, production and non-production hours shall be maintained in English. These records shall include daily plots from the track plotting equipment and identify the site where material was deposited / disposed off.
44. The contractor has to record and provide following information about the progress of dredging, duly signed by dredging inspector (if nominated) to NHO and Engineer i.e NHM(O) at the end of each day. The information must contain:
- a. Start and stop time of dredging.
 - b. Dumping Time for each Run (if applicable).
 - c. Dredge volume for each day along with method of calculation.
 - d. Reasons of delays to continue works, (if any).

- e. Environmental discrepancy/ monitoring log.

REMOVAL OF FLOATING DEBRIS

- 45. Floating debris within the Site arising from any source shall be collected and disposed off by the Contractor at regular agreed intervals. Floating debris shall be prevented from dispersing outside the Site.

SWEEP OF DREDGED AREA

- 46. Upon completion of dredging work, Contractor shall sweep the dredged area to ensure that design depth and edge lines have been obtained in accordance with the contract. The Contractor shall re-dredge the dredged area at any place, where the specified requirement of depth and edge lines is not met. However, once harbour is handed over and accepted by the Employer, no responsibility will accrue to the Contractor for re-dredging etc. Objection if any has to be reported to the Contractor within a maximum period of **10 (Ten) days** of the submission of charts and drawings of the soundings under taken jointly.

DREDGED VOLUME CALCULATIONS

- 47. Dredge volume computations will be done on **Hypack software**. All sensors calibration will be undertaken prior and after the survey and same will be recorded and jointly signed by Contractor and the Employer's rep. Survey will be repeated in case of discrepancies in calibration and results.

SURVEY OF DUMPING SITE AND DUMPING ROUTE

- 48. No dumping of dredged material shall be carried out outside the designated dumping sites. Before the start of dredging works, survey of surrounding areas as depicted in **Appendix II to Annex A (Fig I-5)** of channel, basin, dumping route followed, offshore dumping area (**if utilized**) and its surrounding area of INM, will be carried out during IN survey and OUT survey, in order to monitor siltation/spillage of material in above designated areas.
- 49. Surrounding areas of channel, basin, final sea dumping site and dumping route survey will be jointly carried out by the National Hydrographic Office (NHO) rep and the contractor for comparison and spillage of material on dumping route. Any spillage of material on dumping route or surrounding area of dredging site will be removed by the contractor without any cost obligation on employer.

DREDGING PARAMETERS AND TOLERANCES

47. Dredging parameters and tolerances are given below:

No	Description	Vertical Tolerance(in meters)	
a.	Bottom	New Basin	+0 -0.3m
		Existing Basin	
		Existing Channel	
	Slopes	Jetty	1:0
		New Basin/ Existing Basin and Channel	1:5

Note:

- 1. Tolerances measured vertically with the positive values reflecting elevation above the design level*
- 2. Tolerances below surface depth of 10m and 8m or designed for a particular area will not be payable*

PRE/ POST & DREDGING MONITORING HYDROGRAPHIC SURVEYS

GENERAL

1. Technical Specifications for Pre/ Post & Dredging monitoring contain provisions and requirements essential for Bathymetric Survey, and apply to this contract, whether or not referred to herein.

SCOPE OF SURVEY WORK

2. Hydrographic surveying of dredging areas shall include high resolution Single beam bathymetric surveys (Multibeam surveys shall be conducted after OUT survey for indication of high points between the sounding lines.), all equipment calibrations, tidal observations and leveling of tide gauges, daily bar check record etc.

ENGINEER

3. NHM(O) will be the Engineer for the Capital Dredging Project of Ormara Naval Harbour (ONH) for administrative activities. However, technical responsibility of the dredging project will rest with NHO.

SURVEY RESPONSIBILITY

4. Survey and Charting equipment, software for dredging monitoring surveys (IN, Interim and OUT) will be from the Contractor. However, the Contractor shall arrange various survey equipment, boats, men, material and other associated equipment for conducting single beam, Multibeam bathymetry including Side Scan Surveys for his own assessment and day to day progress monitoring. Employer shall not provide or facilitate any such requirements of contractor. Contractor shall notify the Employer rep at least 15 days in advance prior IN Survey, Joint Interim Survey(s) and OUT Survey(s) requirements. Responsibility for dredging monitoring surveys are as below:

- a. All surveys and associated works will be carried out jointly in presence of authorized reps of employer under contractor arrangement.
- b. All survey equipment and project parameters, sound velocity profiles, sensor/ equipment offsets, Patch test/ results, Bar Checks records, Draught Measurements, Tide readings and other data records (raw and processed) shall be signed by participating reps of Employer and contractor on daily basis during the surveys.

- c. Any observation is to be recorded and to be communicated to all concerned authorities (i.e Engineer NHM(O) or his authorized Rep, NHO and Contractor) during the surveys.
- d. All survey data will be jointly processed on Hypack Software at Employer site. Processed data and fair sheet shall be signed by nominated hydrographic surveyor/ representative of Employer and Contractor. Survey report will be countersigned by Dy HoP within 10 days of survey completion.
- e. Only IN Survey and Out Survey will be repeated in case of result beyond acceptable standards as stipulated. Other than IN and OUT survey, repetition of survey will be sole discretion of the Employer rep (NHO).
- f. The Contractor shall, at his own expense, carry out all the necessary surveys, calculations, measurements and setting out of the Works and shall for this purpose engage qualified and competent hydrographers whose names and qualifications shall be submitted to the Employer. The Surveyor shall be selected having appropriate experience (Annex B, Sub-para 24(q)), and as far as possible, the same surveyor shall be provided throughout the Contract period.
- g. Before starting/ setting out, Contractor shall re-confirm the coordinates and levels shown for any existing Stations or Benchmarks.
- h. All survey data (digital or hard copy) will be the property of Employer and shall remain in safe custody of NHO/ Employer's Rep upon completion of dredging project. Contractor may consult the survey data for dredging orientation and assessment during the phase of dredging operation/project. All data will be sole property of PN and will be handed over to National Hydrographic Office (NHO) by Contractor upon completion of OUT Survey(s). Contractor will be liable for unauthorized disclosure, copying or transfer of survey data from Dredging system during project duration or afterwards.

SURVEY PARAMETERS

5. Following survey parameters shall be used:

S No	ATTRIBUTE	PARAMETERS/ VALUES
a.	Spheroid:	WGS-84
b.	Semi major Axis:	6378137.0 m
c.	Reciprocal of flattening:	298.2572235630

d.	Projection:	UTM (Zone 41 North)
e.	Latitude Origin:	00 N
f.	Longitude Origin:	63 E
g.	False Easting:	500,000
h.	False northing:	0
j.	Scale factor:	0.99960

SINGLE BEAM BATHYMETRY SURVEYS

6. Following guidelines are to be adhered for survey field data collection and fair sheet production:

- a. Single beam line spacing not more than 5m apart for IN and OUT survey(s), unless otherwise directed based on the survey area.
- b. Cross lines are to be run at least 4 x times of the line spacing set for the survey. Employer or its rep from National Hydrographic Office (NHO) may decrease width of cross lines in the ONH channel and basin. Moreover, cross check statistics (point of interaction of main survey lines and cross lines) are to be generated and analysis are to be made part of the survey report.
- c. Fair sheets are to be plotted on 1:1000 scale. The density of soundings on sounding chart along the line is to be about three per centimeter or as mutually agreed by both parties at start of IN survey and same will be used in all subsequent surveys.
- d. In the vicinity of jetties or wharves, lines are to be run parallel to the line of the berths at 2 and 5 m distance from them.
- e. Depth alongside jetties is to be verified by means of lead line.
- f. No voids other than specified survey line spacing are to be left in the dredging area during each survey.

- g. No bathymetric surveying shall be undertaken where the wave heights exceed $H_s = 0.2\text{m}$ without a heave compensator being fitted to the recording instrument. No surveying shall be undertaken where wave heights exceed $H_s = 0.7\text{m}$.
- h. OUT Survey(s) shall be carried out in a similar manner and accuracy to the IN surveys. Post-dredged survey shall also include area either side /around of dredging areas (**Appendix II to Annex A**) to determine occurrence of any siltation due to the contractor's work/fault.
- j. Joint interim surveys shall be carried out and plotted for all progress measurements on 1:1000 scale with a line spacing of 5m. Cross lines are to be run at least 4 times of the line spacing set for the survey. The surveys shall be carried out and submitted in a similar manner to the pre-dredge surveys.

MAGNETOMETER

7. Prior to commencement of dredging, a IN Survey and Magnetometer survey of the dredge area and the dumping site shall be carried out by the Contractor, as soon as possible after the award of Contract and mobilization of equipment, but not more than 30 days before commencement of dredging within the particular area. The survey shall extend in all directions horizontally to identify magnetic anomalies in the area.

SURVEY ACCURACY STANDARDS

8. Accuracy standards of IHO (S-44, **edition 6.1.01, 2022**) are required to be achieved.

GROUND CONTROL

9. All hydrographic surveys shall be carried out with reference to Bench Marks / Chart Datum designated by the NHO.

SINGLE-BEAM ECHO SOUNDING EQUIPMENT

10. A precise survey Echo Sounder to be employed for the hydrographic surveys, and shall satisfy the following:

a. Depth recording system Digital output.

b. Minimum depth reading 0.5 m.

- c. Minimum depth resolution 0.05m
- d. Transducer frequency Dual (200 - 210 kHz and 30 - 40 kHz)
- e. Beam angle 8 or less.

- 11. If two systems are used, the preferred system is to be nominated "Primary".
- 12. The system is to operate on dual frequencies; both frequencies data is to be logged and the **higher frequency data is to be considered Primary Depth, where Primary Depth will be the depth used for all volume computation.**
- 13. The quality of the digital graphic record is to be such that depths can be digitized or manually read off the trace to fill gaps in the digital record and to allow QA and audit.

CALIBRATION OF SBES

- 14. Echo sounders are always to be set to read depth below the surface of the sea, **and never to depth below the keel.** Before use, they must be calibrated precisely and adjusted for draught setting, index error and sound velocity. Allowance must be made for vessel squat.
- 15. Bar Check shall be carried out jointly (by both parties) before start of sounding operation in vicinity of the site. Markings on the suspension lines of Check Bar can also be verified jointly by comparing with a standard steel tape before bar check.
- 16. Index error and draught setting (TX) are to be determined from a shallow bar check and corrected for by adjusting the draught control on the echo sounder recorder.
 - a. The echo sounder bar check traces are to be signed by the Employer's and Contractor's Representatives and the same is to be retained and rendered with survey results.
 - b. Between bar checks the echo sounder draught setting may be adjusted for known changes in the draught of vessel, where applicable and agreed.

17. Boat squat effects at sounding speed of more than 4 knots (if used) and over a range of water depths (if practicable), are to be determined from carefully controlled trials. Squat is to be applied to all measured depths, where the effect exceeds 0.1 m.

SWEEP SURVEY & SIDE SCAN SONAR SURVEY

SIDE SCANNING

19. In addition to the post-dredging bathymetric survey, the Contractor shall prove that no part of the dredged area protrudes above the required dredged level, by carrying out Sweep & Side Scan Sonar surveys of the dredged area

SPEED DURING SOUNDING

20. Speed during sounding is not to exceed 4 Knots. However, speed of the vessel will be reduced further over the slopes to achieve required accuracies.

REDUCING THE SOUNDINGS

21. While reducing soundings, the principle to be observed is that depths are never to be shown greater than they actually are, relative to sounding datum.
22. All soundings are to be corrected for vessel draught if draught correction is not catered for at data acquisition stage and agreed by both parties.
23. Heave data is to be applied on all soundings and reduced accordingly.
24. Soundings must also be corrected for variation in sound velocity (SV) where applicable and agreed.
25. Soundings must be corrected for tidal heights. In digital logging and processing systems, the tidal data will be recorded in a discrete file. The system utilizes the data to interpolate the tidal heights as required, and reduce the raw depths to Sounding Datum.
26. RTK tide is to be utilized preferably for correction of sounding in order to achieve better results.

PROCESSING OF SURVEY DATA

27. It is essential that all significant features, particularly pinnacles and other dangers are precisely positioned on sounding lines when they are plotted. Sounding should be plotted at a density indicated in "Survey Parameters".

PREPARATION OF FAIRSHEET AND VOLUME COMPUTATIONS

28. After the completion of sounding operation of a survey area, Fairsheets are to be prepared within one week. The final fair sheet shall be prepared on Universal Transverse Mercator (UTM) Grid with border graduated in geographical system of coordinates using fix parameters like sheet origin, grid/border graduation etc. for IN, OUT and Interim survey(s). Dredge volume computations shall be conducted on mutual agreement between contractor and Employer using (Hypack Software) for determining progress of the dredging.
29. The Annex containing information of channel design/ faces and detailed volume report generated by the software shall be made part of the report.

DATA TO BE RENDERED ON COMPLETION OF IN/OUT/ INTERIM SURVEYS

30. Following record is to be produced:

- | | | |
|----|--|----------------------------------|
| a. | Report of survey | (3 copies) |
| b. | Fair Sheets | (3 copies, with colour contours) |
| c. | Sounding Data | (XYZ) |
| d. | Side Scan Data | (digital and printed) |
| e. | Field Records including bar check and tide Log | |
| f. | Digital Data | (Complete Hypack Project) |

- g. Daily Narrative

REPORT OF SURVEY

31. The Report of Survey on completion of survey works, which should be in two parts:

- a. Part one (Descriptive)

- b. Part Two (Technical Annexes)

32. The detailed comments on the techniques adopted while surveying the required areas including various accuracies achieved and listing of standard error assessments etc. The line spacing, density of sounding, the speed of advance; scale of the survey; geodetic reference system; and tidal correction, weather and sea condition and other observations if any may be included in the Report of Survey. Technical details should be provided including the followings:

- a. The positioning system used, together with its standard error and relative accuracy.

- b. Tide gauge / pole used, calibration, leveling, record of Tide gauge checks, transfer of sounding datum(if applicable), Tidal observations.

- c. Detail of echo sounders used together with beam angles, frequencies, Patch test results and calibration data etc.

- d. Sounding error analysis

- e. Standards parameters used during the survey including:

- (1) GPS Antenna / Sensor offsets.

- (2) Vessel draught.

c. Digital fair sheets PDF or as decided by (NHO)

d. Survey Reports / QA data MS Word and PDF format

WEATHER/ SEA CONDITIONS FOR SURVEY

37. The contractor is to log weather data and survey is not to be conducted in rough weather (Please refer para 6g of this appendix).

APPENDIX IV TO ANNEX – A

OLD GEOLOGY AND SOIL CONDITIONS

1. **GEOLOGY** The coastal area of Makran is generally occupied by mountain ranges, sand dunes and tidal flats. The coastline is indented with bays and characterized by the occurrence of promontories (such as at Ormara) and peninsulas of white clay cliffs. The Makran Coastal Range consists of a succession of ridges which are scoured and cut by torrential streams. Significant structural movements have occurred along the Makran coast within historic time. Broad upwarping continues to take place with varying amounts of uplift and tilting.

2. The outstanding structural feature of the Makran Coastal Range is the prominence of huge, doubly plunging synclines (down folds or troughs) that have low dips in their broad central areas and steep dips in their outer limbs. The structures involve thick sequences of sandstone and shale, parts of the Talar formation and Hinglaj group. The formation directly underlying both the Talar sandstone and the Hinglaj group is the structurally weak Parkini mudstone.

3. The headland of Ormara consists of the Ormara and Jiwani formations. The thickness of the Ormara formation varies from 60 to 900 m or more. This formation consists of soft sandy clay, forming fairly high cliffs. The sandy clay has a buff colour. The Ormara formation is nearly horizontal, and well protected by upper beds of sandstone, about 3 m thick, with a resistant capping of the Jiwani limestone formation. The limestone contains shell fragments and sandy hard calcareous matrix.

4. **Soil Conditions - East Bay**
 - a. **General Ormara Area** The beaches on the east and west bays are composed of fine sands mixed with silt and broken shells. The area fringing the headland is covered by the material eroded from the headland, consisting of medium to fine sand, small gravels and pebbles. The wide coastal plain, north of Ormara, is covered by fine sand and silty clay. Surface samples taken from the beaches indicate the presence of fine sand mixed with some silt.

 - b. **Sub Soil Investigations** A sub 5011 investigation has been carried out in the East Bay in order to establish sub-surface conditions within dredge areas and at the location of future quay walls, jetties and breakwater. A total of 32 boreholes has been drilled at the locations Shown on Figure 4.1. The boreholes were generally drilled to depths of 10 to 15 m below seabed, with two to shallower depths of 3.5/4.0 m and 3 boreholes to 35 m below seabed. The logs of dredging site boreholes showing the stratification, type of soils and their consistency, are shown on Figures 4.2/A to 4.8/B. The subsurface conditions discussed in the following paragraphs are based on the data and findings presented in the Soils Report by STM of 2019. Same will be shared with successful bidder.

 - c. **Intertidal Zone** The intertidal zone is generally covered by 1 to 4 m silty to very silty, fine to medium grained sand. The percentage fines passing sieve aperture size 0.075 mm (silt/clay) varies between 7.5 and 50%. The relative

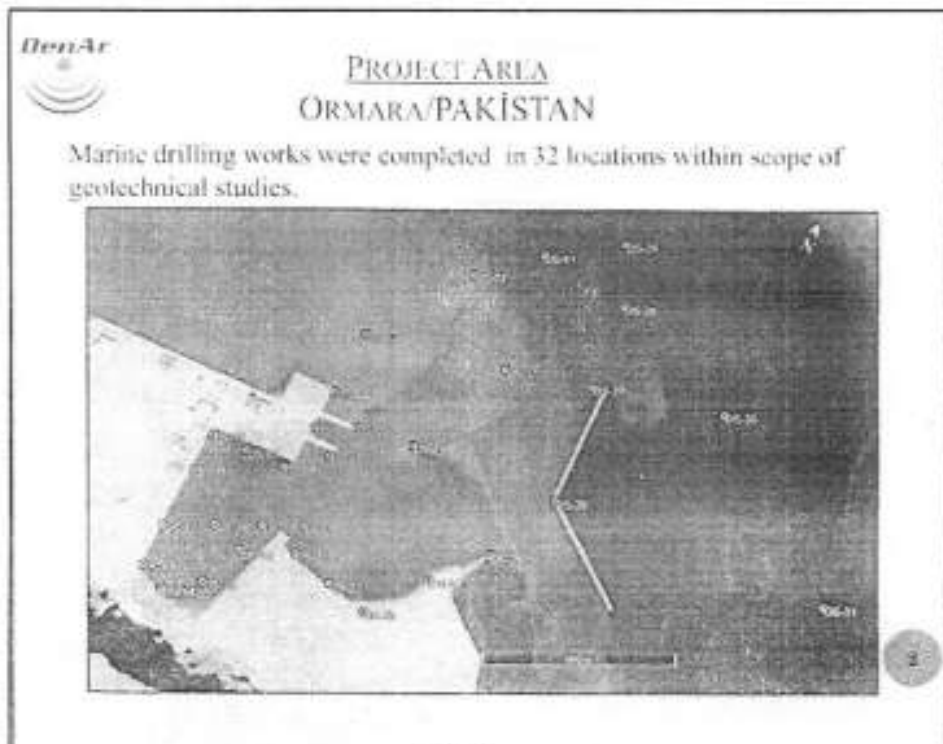
density of the silty sand layer varies from loose to medium dense and dense. The upper silty sand layer is underlain by alternating layers of dense to very dense sandy silt and medium stiff to very stiff silty clay, within the depths explored. Grain size analysis done in the laboratory on 11 seabed samples and 11 beach samples, taken at selected locations, showed that these surface soils consist mainly of very silty sands and slightly sandy silts. This type of soil has also been encountered in the boreholes, as described above.

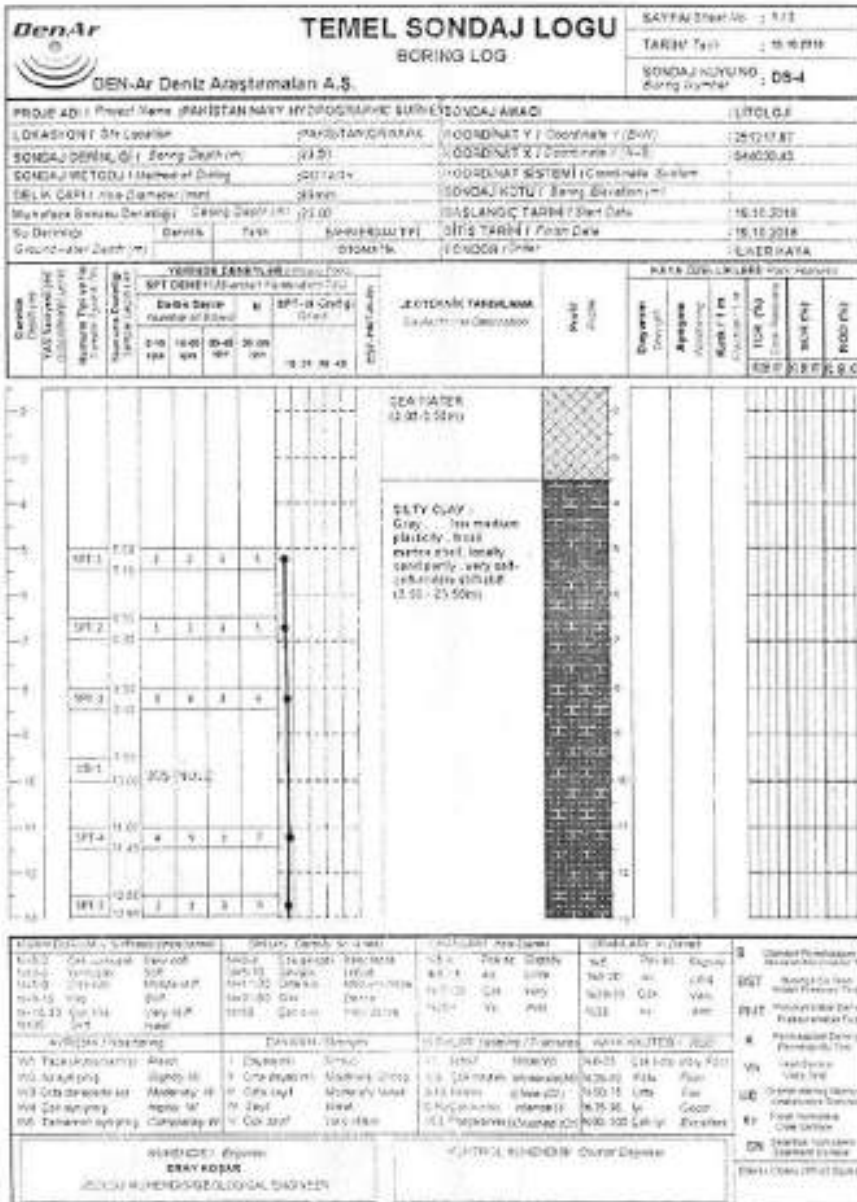
d. **Offshore Borehole Conditions** The offshore boreholes were drilled from sea bottom elevations between 1.5 m and 6.5 m CD. The seabed, in the area investigated, is covered by 2 to 4.5 meters of medium dense to dense silty sand. Contrary to the intertidal zone, the upper part of this sand layer has a percentage fines, passing sieve aperture size 0.075 mm, between 3 and 21.2. The grain size analysis done in the laboratory showed that the percentage fines (silt /clay fraction) become 40 to 50% at about 2.5 to 3.0 depth. The upper silty sand layer is underlain by medium dense clayey silt, grading into hard silty clay with depth. At about 8.0 to 9.0 m depth the clayey silt to silty clay formation is in turn underlain by a very dense, very silty fine sand to sandy silt.

5. **SOIL AND ROCK CONDITIONS ORMARA HEADLAND** The following description of soil and rock conditions is based on the findings of a field reconnaissance investigation carried out at the Ormara headland. The slope of the headland has a very prominent dip towards the south-west. The major type of soil, constituting the Ormara headland, is brown sandy silt with several interbedded layers of grayish brown silty clay. These sediments are covered, at regular intervals, by a resistant capping of dense sand and siltstones. The capping occurs in thin layers, but is 3 m or more at places on the west side of the head. Due to erosion of the unconsolidated silty and clayey soils, the capping rock is being undercut on the southwest side of the headland. Very large boulders have broken loose, due to this undercutting, and fallen down along the slopes into the valley. The capping rock at this location is weathered, highly fractured with faults. Large active faults have been observed, generally running from south-east to north-west. These faults are very likely the cause of rock falls and slides occurring along the south and west slopes of the headland, similar to the south-west area described above.

LATEST GEOLOGY AND SOIL CONDITIONS ORMARA

1. Latest Ormara geotechnical study conducted by Den-AR Aras-taimari A.S





<p>YERİNİN TANIMI / Soil Name</p> <p>SEA WATER / DENİZ SUYU</p> <p>CLAY / KİL</p>	<p>YERİNİN TANIMI / Soil Name</p> <p>SEA WATER / DENİZ SUYU</p> <p>CLAY / KİL</p>	<p>YERİNİN TANIMI / Soil Name</p> <p>SEA WATER / DENİZ SUYU</p> <p>CLAY / KİL</p>	<p>YERİNİN TANIMI / Soil Name</p> <p>SEA WATER / DENİZ SUYU</p> <p>CLAY / KİL</p>
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<p>YERİNİN TANIMI / Soil Name</p> <p>SEA WATER / DENİZ SUYU</p> <p>CLAY / KİL</p>	<p>YERİNİN TANIMI / Soil Name</p> <p>SEA WATER / DENİZ SUYU</p> <p>CLAY / KİL</p>
---	---

<p>YERİNİN TANIMI / Soil Name</p> <p>SEA WATER / DENİZ SUYU</p> <p>CLAY / KİL</p>	<p>YERİNİN TANIMI / Soil Name</p> <p>SEA WATER / DENİZ SUYU</p> <p>CLAY / KİL</p>
---	---

Fig-4.2/A



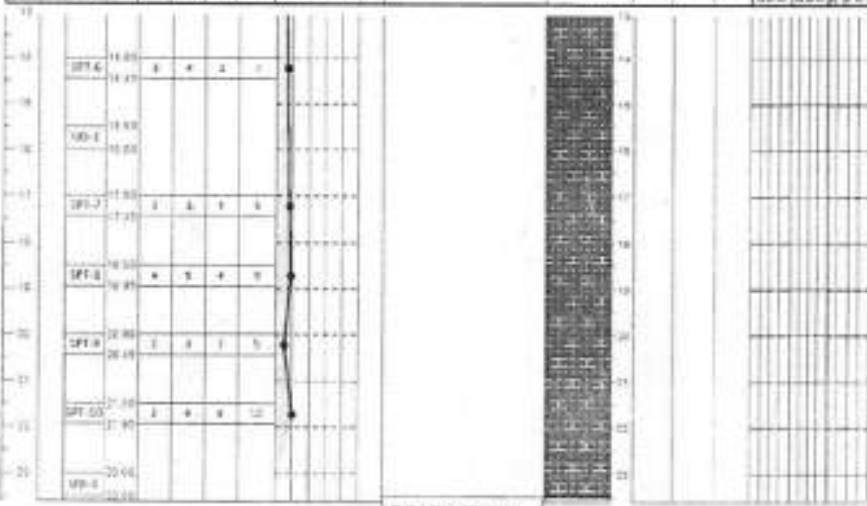
DenAr
DEN-AR Deniz Araştırmaları A.Ş.

TEMEL SONDAJ LOGU
BORING LOG

SAYFA/Sayfalar : 2/2
TARİH/Tarih : 18.12.2018
SONDAJ KUYU NO / Boring Number : DS-4

PROJE ADI / Project Name	PAKISTAN NAVY HYDROGRAPHIC SURVEY/SONDAJ AMACI			ÜTÜK/Üç
LOKASYON / Site Location	PAKISTANORMARA	KOORDİNAT X / Coordinate X (UTM)	1959217.87	
SONDAJ DERİNLİĞİ / Boring Depth (m)	33.50	KOORDİNAT Y / Coordinate Y (UTM)	1448331.43	
SONDAJ METODU / Method of Drilling	ROTARY	KOORDİNAT SİSTEMİ / Coordinate System		
DELİK ÇAP / Hole Diameter (mm)	89mm	SONDAJ HÜCU / Boring Elevator (m)		
Muhafaza Benzeri Derinliği / Casp Depth (m)	33.50	BASLANIM TARİHİ / Start Date	18.12.2018	
Su Derinliği / Seawater Depth (m)		Tarih / Date	18.12.2018	
Çukurluk Derinliği / Pit Depth (m)		STASYON / STATION	SONDOR / DRYER	
			ULUSMATA	

Derinlik / Depth (m)	SPT DEĞERİ / SPT Value	YERİNDE SİNYELERİ / Symbols				KAYI / Sample	KAYA ÇİZİMİ / Lithology	KAYI NO / Sample No	KAYI DERİNLİĞİ / Sample Depth (m)	KAYI ÇAP / Sample Dia (mm)	KAYI YAPISI / Sample Structure	KAYI RENKİ / Sample Color	KAYI TİPİ / Sample Type	KAYI NOTU / Sample Note
		0-10	10-20	20-30	30-40									
		0	1	2	3									



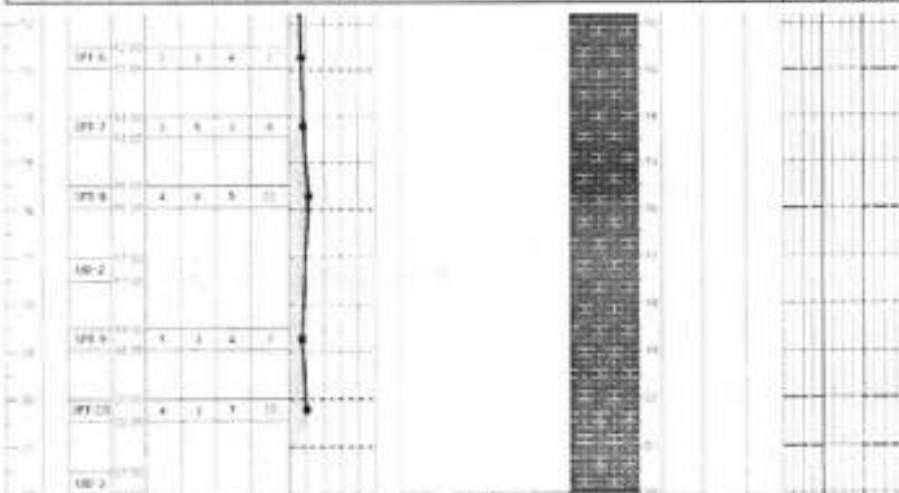
YERİNDE SİNYELERİ / Symbols	ÇUKURLUK / Pit	SONDAJ HÜCU / Boring Elevator	SONDAJ METODU / Method of Drilling	SONDAJ DERİNLİĞİ / Boring Depth	SONDAJ HÜCU / Boring Elevator	SONDAJ METODU / Method of Drilling	SONDAJ DERİNLİĞİ / Boring Depth	SONDAJ HÜCU / Boring Elevator	SONDAJ METODU / Method of Drilling	SONDAJ DERİNLİĞİ / Boring Depth	SONDAJ HÜCU / Boring Elevator	SONDAJ METODU / Method of Drilling	SONDAJ DERİNLİĞİ / Boring Depth	SONDAJ HÜCU / Boring Elevator	SONDAJ METODU / Method of Drilling	SONDAJ DERİNLİĞİ / Boring Depth
0-10	10-20	20-30	30-40	0	1	2	3	4	5	6	7	8	9	10	11	12

Fig-4 2/B



 DenAr DEN-AR Deniz Arařtırmaları A.Ő.	TEMEL SONDAJ LOGU		SAYFA Sayfa No : 2/2
	BORING LOG		TARİHİ Tarih : 16.10.2018
			SONDAJ NUMARASI / Boring Number : DS-14
PROJE ADI / Project Name : PAKİSTAN NAVY HYDROGRAPHIC SURVEY SONDAJ İNHAZI			UJTD.04
LOKASYON / In Location : PAKİSTAN OKRAZI	KOORDİNAT Y / Coordinate - Y : 25113625	KOORDİNAT X / Coordinate - X : 64402243	
SONDAJ DERİNLİĞİ / Boring Depth : 22.00	KOORDİNAT Y / Coordinate - Y : 25113625	KOORDİNAT X / Coordinate - X : 64402243	
SONDAJ METODU / Method of Boring : ROTARY	KOORDİNAT SİSTEMİ / Coordinate System : UTM	SONDAJ KUTU / Boring Direction : -	
DEĞER ÇAP / Hole Diameter : 89mm	BASLANGIÇ TARİHİ / Start Date : 16.10.2018	BİTİŞ TARİHİ / Stop Date : 16.10.2018	
Muhafaza Borusu Derinliği / Corrosion Depth : 21.50	BAŞLANGIÇ TARİHİ / Start Date : 16.10.2018	BİTİŞ TARİHİ / Stop Date : 16.10.2018	
Su Derinliği / Groundwater Depth : -	ÖLÇÜMÜ / Measurement : -	SONDOR ÇİMER / SONDOR CHIMAR : -	TEKİR KAYA

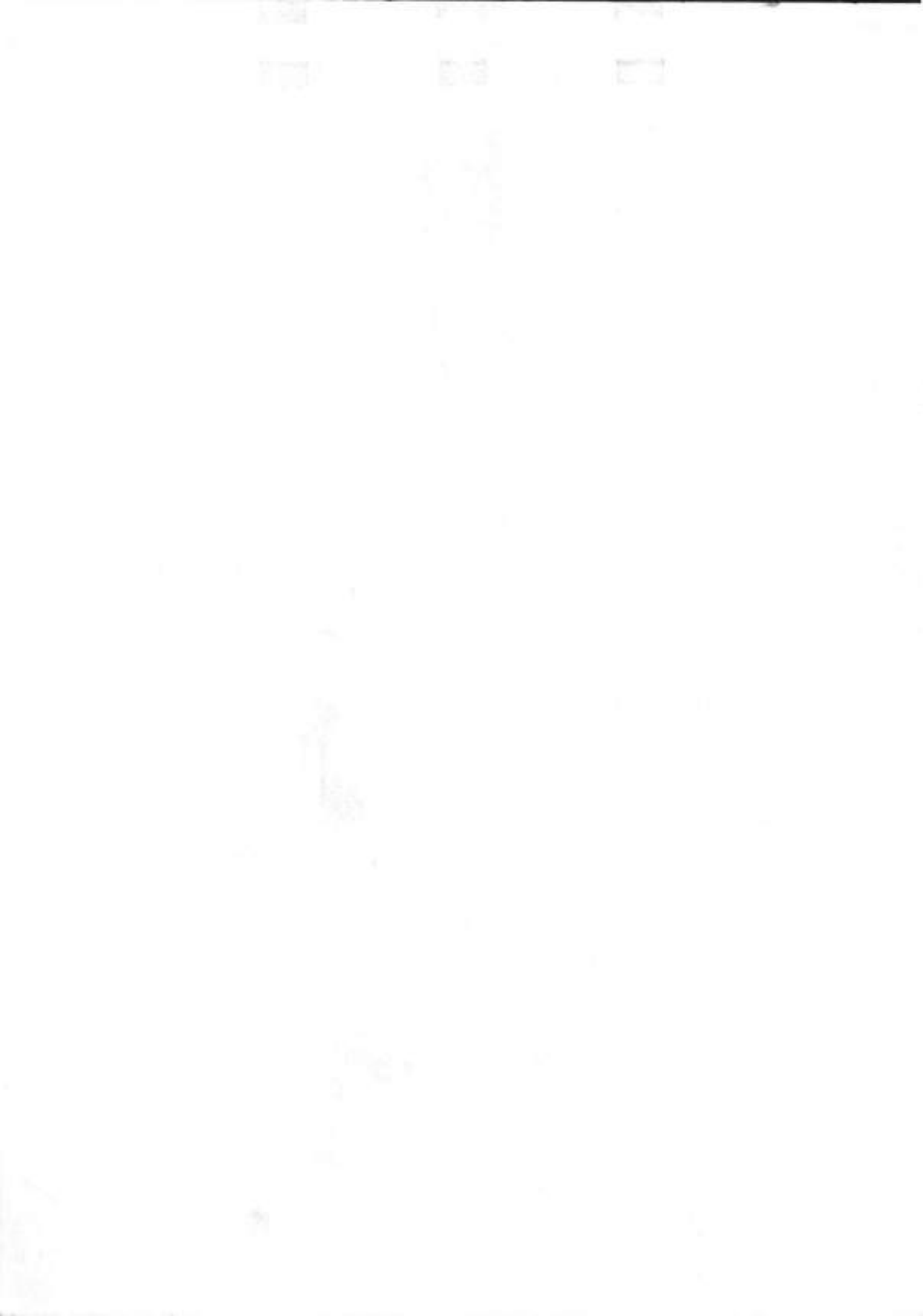
Yerinde Deneyler / In-situ Tests	YERİNDE DENİYLERİ / In-situ Tests				NOTELERİN TANIMLAMA / Description of Notes	KAYIT / Record	KAYA ÖLÇÜMLERİ / Rock Measurements			
	SPT DENİYİ / Standard Penetration Test						KAYIT / Record	KAYIT / Record	KAYIT / Record	KAYIT / Record
	Çarpma Sayısı / Number of Blows	4	SPT, N (Ortalama) / SPT, N (Average)	4						
1-10	10-20	20-30	30-40	40-50	10	20	30	40		
10-20	20-30	30-40	40-50	50-60	60	70	80	90		



Yerinde Deney / In-situ Test	Yerinde Deney / In-situ Test	Yerinde Deney / In-situ Test	Yerinde Deney / In-situ Test	Yerinde Deney / In-situ Test
1-10	10-20	20-30	30-40	40-50
10-20	20-30	30-40	40-50	50-60
20-30	30-40	40-50	50-60	60-70
30-40	40-50	50-60	60-70	70-80
40-50	50-60	60-70	70-80	80-90
50-60	60-70	70-80	80-90	90-100



Fig-4.4/B





DEN-Ar Deniz Arařtırmaları A.Ş.

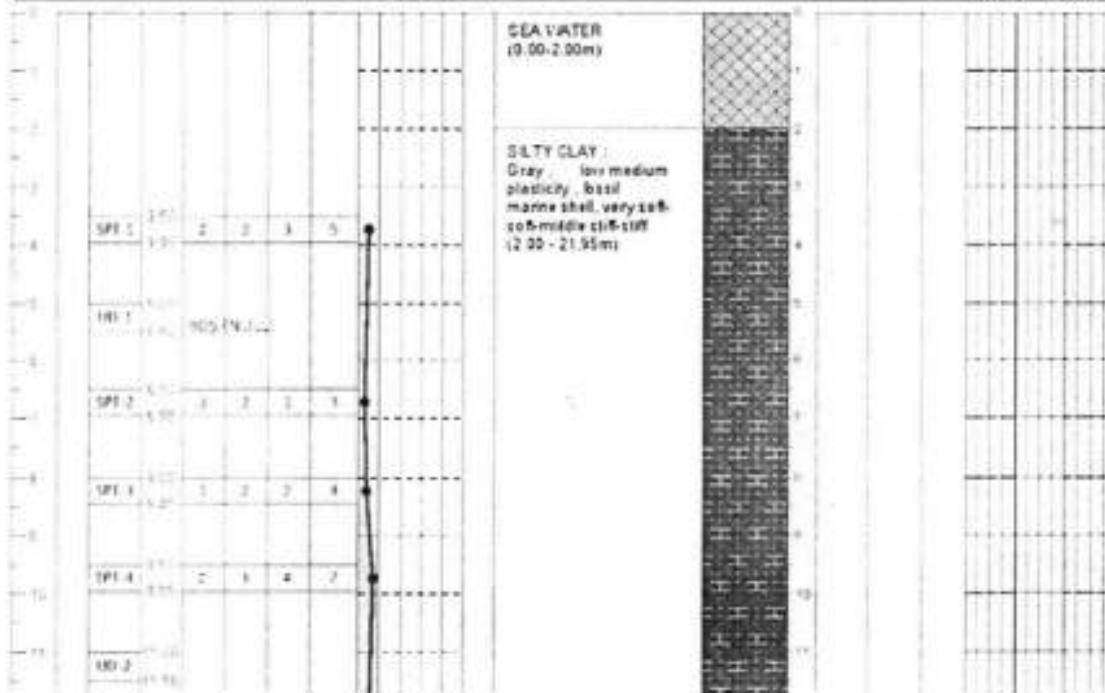
TEMEL SONDAJ LOGU

BORING LOG

SAYFA / Sheet No : 1 / 2
 TARİH / Date : 16.10.2018
 SONDAJ KUYUNUNUN / Boring Number : DS-18

PROJE ADI / Project Name	PAKİSTAN NAVY HYDROGRAPHIC SURVEY		SONDAJ AMACI	LİTOLOJİ
LOKASYON / Site Location	PAKİSTAN ÖRMEARA	KOORDİNAT Y / Coordinate (E-W)	1251150.33	
SONDAJ DERİNLİĞİ / Boring Depth (m)	21.95	KOORDİNAT X / Coordinate (N-S)	164924.00	
SONDAJ METODU / Method of Drilling	ROTARY	KOORDİNAT SİSTEMİ / Coordinate System	-	
DELİK ÇAP / Hole Diameter (mm)	90mm	SONDAJ KUTU / Boring Elevator (m)	-	
Muhafaza Barosu Derinliği / casing Depth (m)	21.50	BASLANGIÇ TARİHİ / Start Date	16.10.2018	
Su Derinliği / Groundwater Depth (m)		Tarih / Date	16.10.2018	
		BAHMERDAH SİPİ / OTOMATİK	BITİŞ TARİHİ / Finish Date	16.10.2018
			SONDOR / Çiler	TEKER KAYA

Derinlik / Depth (m)	SPT DEĞERİ / SPT Value	YERİNDE DENEYLER / In-situ Tests				JEOTEKNİK TANIMLAMA / Geotechnical Classification	Freyz / Frayz	KAYA ÖZELLİKLERİ / Rock Properties			
		Q (MPa)	U (MPa)	ν	SPT-N Grafığı / Graph			Dayanım / Strength	Yıpranma / Weathering	Kirik / m / m	TCR (%)
0-10	10-20	2	3	3	5	Silty Clay Gray, low medium plasticity, basal marine shell, very soft to soft-medium stiff (2.00 - 21.95m)	-	-	-	-	-
10-20	20-30	2	3	3	5						
20-30	30-40	2	3	3	5						
30-40	40-50	2	3	3	5						



AKIŞIK / Liquid Limit (%)	YERİNDE / In-situ	AKIŞIK / Liquid Limit (%)	YERİNDE / In-situ	AKIŞIK / Liquid Limit (%)	YERİNDE / In-situ	AKIŞIK / Liquid Limit (%)	YERİNDE / In-situ
LL20	20	LL20	20	LL20	20	LL20	20
LL10	10	LL10	10	LL10	10	LL10	10
LL0	0	LL0	0	LL0	0	LL0	0
LL100	100	LL100	100	LL100	100	LL100	100

WT	Taşınabilirlik / Consistency	WT	Taşınabilirlik / Consistency	WT	Taşınabilirlik / Consistency	WT	Taşınabilirlik / Consistency
WC	Acılaşma / Shrinkage	WC	Acılaşma / Shrinkage	WC	Acılaşma / Shrinkage	WC	Acılaşma / Shrinkage
WU	Orta dayanım / Medium strength	WU	Orta dayanım / Medium strength	WU	Orta dayanım / Medium strength	WU	Orta dayanım / Medium strength
WV	Orta dayanım / Medium strength	WV	Orta dayanım / Medium strength	WV	Orta dayanım / Medium strength	WV	Orta dayanım / Medium strength
WZ	Orta dayanım / Medium strength	WZ	Orta dayanım / Medium strength	WZ	Orta dayanım / Medium strength	WZ	Orta dayanım / Medium strength

WT	Taşınabilirlik / Consistency	WT	Taşınabilirlik / Consistency	WT	Taşınabilirlik / Consistency	WT	Taşınabilirlik / Consistency
WC	Acılaşma / Shrinkage	WC	Acılaşma / Shrinkage	WC	Acılaşma / Shrinkage	WC	Acılaşma / Shrinkage
WU	Orta dayanım / Medium strength	WU	Orta dayanım / Medium strength	WU	Orta dayanım / Medium strength	WU	Orta dayanım / Medium strength
WV	Orta dayanım / Medium strength	WV	Orta dayanım / Medium strength	WV	Orta dayanım / Medium strength	WV	Orta dayanım / Medium strength
WZ	Orta dayanım / Medium strength	WZ	Orta dayanım / Medium strength	WZ	Orta dayanım / Medium strength	WZ	Orta dayanım / Medium strength

Fig-4.5/A





DEN-Ar Deniz Arařtirmaları A.Ş.

TEMEL SONDAJ LOGU

BORING LOG

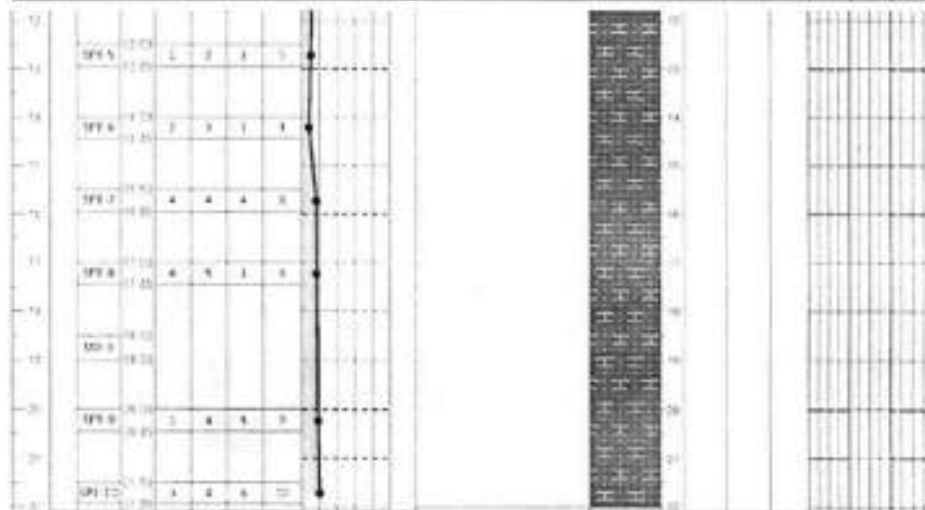
SAYFA/ŞEKRİ No : 2/2

TARİHİ / Date : 18.10.2018

SONDAJ KUYU NO / Boring Number : DS-18

PROJE ADI / Project Name : PAKİSTAN NAVY HYDROGRAPHIC SURVEY/SONDAJ AMACI	İSTİSOLA		
LOKASYON / Site Location : PAKİSTANORMARA	KOORDİNAT Y / Coordinate Y (E-V)	291150.22	
SONDAJ DERİNLİĞİ / Boring Depth (m) : 31.95	KOORDİNAT X / Coordinate X (D-Ş)	164428.09	
SONDAJ METODU / Method of Drilling : ROTARY	KOORDİNAT SİSTEMİ / Coordinate System :	1	
DELİK ÇAP / Hole Diameter (mm) : 89mm	SONDAJ KÖTÜ / Boring Deviation (m) :	-	
Muhafaza Borular Derinliği / Casing Depth (m) : 21.50	BASLANGIÇ TARİHİ / Start Date :	18.10.2018	
Su Derinliği / Depth (m) :	BİTİŞ TARİHİ / Finish Date :	18.10.2018	
Ölçü Birimleri / Units (m) :	ÖLÇÜM YERİ / MEASUREMENT POINT :	SONDOR / CHINA	
		EKİP / CREW :	

Derinlik / Depth (m)	SPT Sayısı / SPT No	SPT Değeri / SPT Value	SPT Hızı / SPT Rate	SPT-11 Değeri / SPT-11 Value	SPT-11 Hızı / SPT-11 Rate	JEOLOJİK TANILAMA / Geological Description	Profil / Profile	KAYA ÖZELLİKLERİ / Rock Properties							
								Dayanım / Strength	Yapısal / Structural	Yıkılma / Fracture	Yıkılma / Fracture				
0-10	10	10	10	10	10										
10-20	20	20	20	20	20										
20-30	30	30	30	30	30										
30-31.95	31.95	31.95	31.95	31.95	31.95										



END OF BOREHOLE
(31.95m)

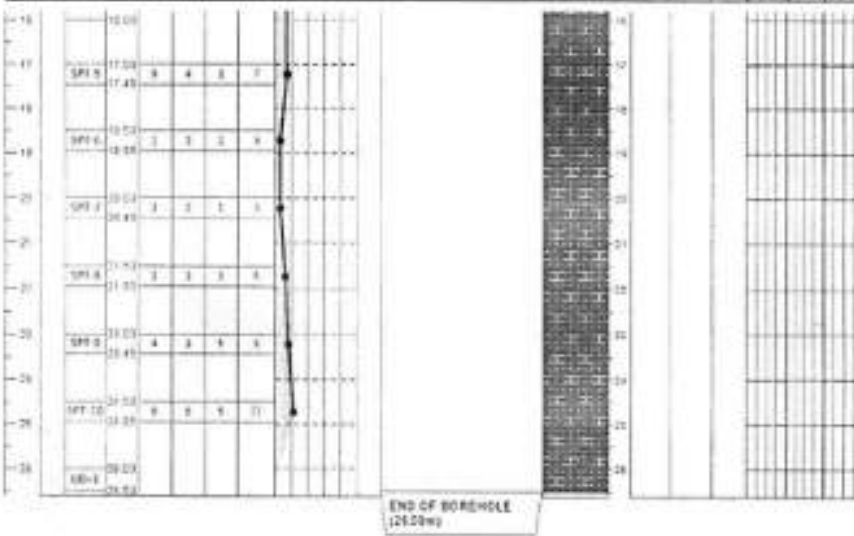
DenAr
DEN-Ar Deniz Araştırmaları A.Ş.

TEMEL SONDAJ LOGU BORING LOG

SAYFA/Sheet No : 2/3
TARİH/Date : 18.10.2018
SONDAJ KUYU NO / Boring Number : 08-18

PROJE ADI / Project Name : İZMİR TAMPONAJI HYDROGRAFIK SURVEY/İZMİR TAMPONAJI		LİTOLOJİ	
LOKASYON / Site Location : İZMİR TAMPONAJI	KOORDİNAT Y / Coordinate Y (ZM)	28 02 15 24	
SONDAJ DERİNLİĞİ / Boring Depth (m) : 26.50	KOORDİNAT X / Coordinate X (ZM)	28 46 46 04	
SONDAJ METODU / Method of Drilling : ROTARY	KOORDİNAT SİSTEMİ / Coordinate System :		
DELİK ÇAP / Hole Diameter (mm) : 89mm	SONDAJ KOTU / Boring Location (m) :		
Muhafaza Borusu Derinliği / Casings Depth (m) : 26.00	SASLANDIĞI TARİH / Start Date :	18.10.2018	
Su Derinliği / Groundwater Depth (m) :	BİTİŞ TARİHİ / Final Date :	18.10.2018	
	SONDOR / Driller :	İ. KURBAN	

Derinlik / Depth (m)	YERLİK SENSÖRLER / Local Sensors				İÇİTİMİN TAAMLAMA / Description of Drilling	Fut / Core	DİĞER ÖLÇÜMLER / OTHER MEASUREMENTS											
	SPT DEĞERİ / SPT Value	Çi / Moisture	W / Water	SPT - M Sınıfı / SPT - M Class			Değişim / Change	Yapı / Structure	Yapı / Structure	Yapı / Structure	Yapı / Structure	Yapı / Structure						
0-10	10	10	10	10														
10-20	10	10	10	10														
20-26.50	10	10	10	10														

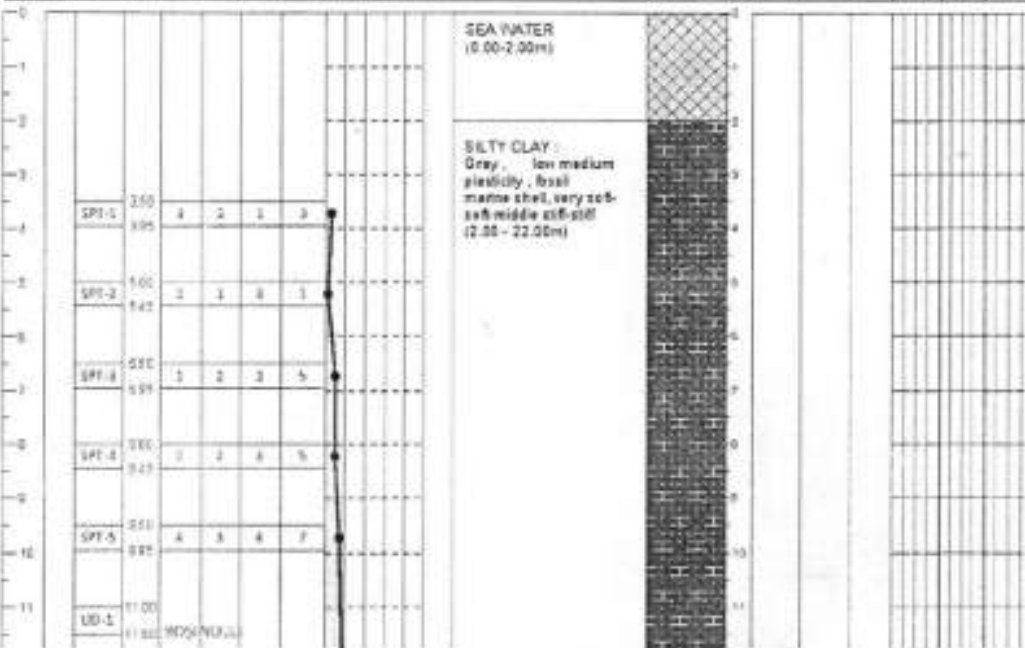


195-2 Çi / Moisture	195-4 Çi / Moisture	195-6 Çi / Moisture	195-8 Çi / Moisture	195-10 Çi / Moisture	195-12 Çi / Moisture	195-14 Çi / Moisture	195-16 Çi / Moisture	195-18 Çi / Moisture	195-20 Çi / Moisture	195-22 Çi / Moisture	195-24 Çi / Moisture	195-26 Çi / Moisture
195-2 W / Water	195-4 W / Water	195-6 W / Water	195-8 W / Water	195-10 W / Water	195-12 W / Water	195-14 W / Water	195-16 W / Water	195-18 W / Water	195-20 W / Water	195-22 W / Water	195-24 W / Water	195-26 W / Water
195-2 SPT / SPT	195-4 SPT / SPT	195-6 SPT / SPT	195-8 SPT / SPT	195-10 SPT / SPT	195-12 SPT / SPT	195-14 SPT / SPT	195-16 SPT / SPT	195-18 SPT / SPT	195-20 SPT / SPT	195-22 SPT / SPT	195-24 SPT / SPT	195-26 SPT / SPT

Fig-4/6/B

 DenAr DEN-Ar Deniz Araştırmaları A.Ş.	TEMEL SONDAJ LOGU		BAYFA/Sheet No : 1 / 2
	BORING LOG		TARİH / Date : 18.10.2018
			SONDAJ KUYU NO / Boring Number : DS-25
PROJE ADI / Project Name : PAKİSTAN NAVY HYDROGRAPHIC SURVEY			SONDAJ AMACI / Purpose : LİTOLOJİ
LOKASYON / Site Location : PAKİSTAN BORDİBARA		KOORDİNAT Y / Coordinate Y (E-W) : 25125.88	KOORDİNAT X / Coordinate X (N-S) : 54416.8
SONDAJ DERİNLİĞİ / Boring Depth (m) : 22.00		SONDAJ METODU / Method of Drilling : ROTARY	
DELİK ÇAP / Hole Diameter (mm) : 89mm		KOORDİNAT SİSTEMİ / Coordinate System :	
Muhafaza Borusu Derinliği / Casings Depth (m) : 21.50		SONDAJ KOTU / Boring Elevation (m) :	
Su Derinliği / Groundwater Depth (m) :		BAŞLANGIÇ TARİHİ / Start Date : 18.10.2018	
Derinlik / Depth		Tarih / Date	
		BAŞMERDAN TİPİ / Borehole Type : OTOMATİK	
		SONDOR / Coffer : İLKER KAYA	

Derinlik / Depth (m)	VAKİT / Sampling Time (min)	Mühürleme Tipi ve No / Sample Type & No	Mühürleme Çapı / Sample Diameter (mm)	YERİNDE DEĞİŞİMLER / In-situ Tests				SPT N Grubu / SPT-N Group	JEOTEKNİK TANIMLAMA / Geotechnical Description	Profil / Profile	KAYA ÖZELLİKLERİ / Rock Features						
				SPT DEĞERLERİ / Standard Penetration Test							Dayanım / Strength	Ayrılma / Weathering	Kırılma / Fracture / Jk	TCE (%) / Core Recovery	DCE (%) / Dilatancy	RCE (%) / RQD (%)	
				1-15 cm	15-30 cm	30-45 cm	45-60 cm										
0-1.00	120			4	2	1	3	18-20-30-40									
1.00-2.00	140			2	1	0	1										
2.00-3.00	150			1	2	3	5										
3.00-4.00	160			2	2	4	5										
4.00-5.00	170			4	3	4	7										
5.00-6.00	180																
6.00-7.00	190																
7.00-8.00	200																
8.00-9.00	210																
9.00-10.00	220																
10.00-11.00	230																
11.00-12.00	240																



HWAY DURUMU / Road Status	GHÜLÜ / Density (g/cm³)	ORANLARI / Pore Content	ORANLARI / W Content	S
hw5-0 Çok yumuşak / Very soft	hw5-4 Çok gevşek / very loose	hw5-8 Fk 40 / Slightly	hw5-12 Fk 40 / Slightly	S
hw5-4 Yumuşak / Soft	hw5-10 Gevşek / Loose	hw5-16 AL / Little	hw5-20 AL / Little	BST
hw5-8 Orta sert / Medium stiff	hw5-16 Orta sık / Medium dense	hw5-20 ÇK / Very	hw5-25 ÇK / Very	PMT
hw5-12 Sert / Stiff	hw5-20 Sık / Dense	hw5-25 V / And	hw5-30 V / And	K
hw5-16 Çok Sert / Very stiff	hw5-24 Çok sık / Very dense			Vs
hw5-20 Sert / Hard				UD
				Kr
				SN

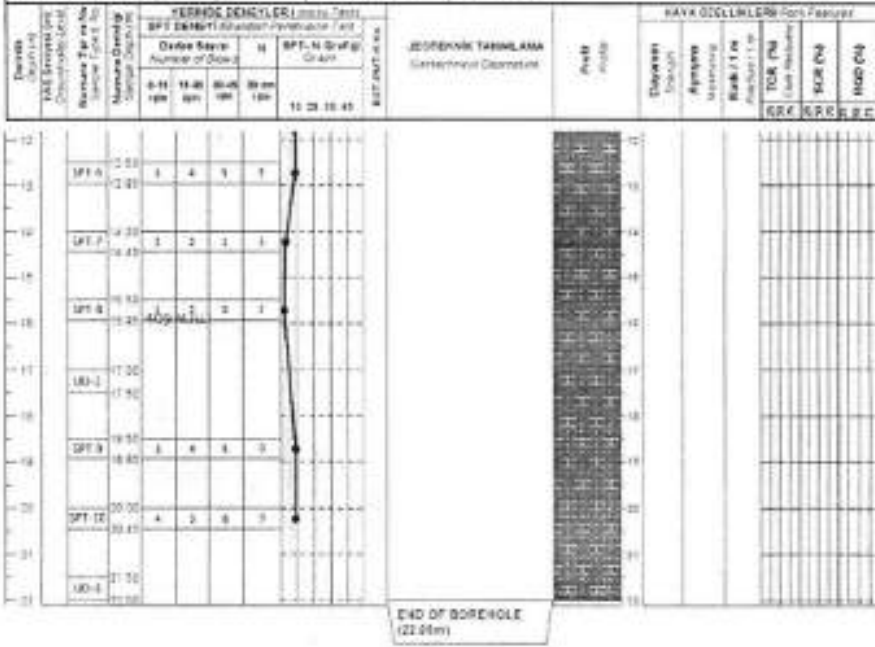
AYRILMA / Weathering	DAYANIM / Strength	HİPOTERM / Plasticity / Fracture	KAYA HAÜTESİ / RQD
W1 Taze / Freshness: Çıkan / Clean	I Dayanım / Strong	0-10 Maf / Maf (M)	hw5-25 Çok sık / Very Rock
W2 Az / Slightly	II Orta dayanım / Moderately Strong	1-3 ÇK / ÇK (M) / silt / silty (M)	hw5-30 HSM / Poor
W3 Orta / Moderately	III Orta / Orta / Orta	3-10 KSM / ÇK / ÇK (S)	hw5-35 ÇK / Fair
W4 Çok / Highly	IV Zayıf / Weak	10-50 ÇK / ÇK / silt / silty (S)	hw5-40 ÇK / Good
W5 Tamamen / Completely	V Çok / Very	50-100 ÇK / ÇK / silt / silty (S)	hw5-45 ÇK / Excellent

MÜHENDİS / Engineer ERAY KOŞAR JEOTEKNİK MÜHENDİS / GEOLOGICAL ENGINEER	KONTROL MÜHENDİS / Control Engineer
--	-------------------------------------

Fig-4.7/A



 TEMEL SONDAJ LOGU BORING LOG		SAYFA/Sheet No : 3/3 TARİH/Date : 16.10.2018 SONDAJ/KUYU NO : DB-25 Boring Number :
DEN-Ar Deniz Araştırmaları A.Ş.		
PROJE ADI / Project Name : PAKİSTAN NAVY HYDROGRAPHIC SURVEY SONDAJ/AMAÇI : LUTK, OJ		
LOKASYON / Site Location : PAKİSTAN DENİZİ SONDAJ DERİNLİĞİ / Boring Depth (m) : 22.00 SONDAJ METODU / Method of Drilling : ROTARY DELİK GARI / Hole Diameter (mm) : 85mm Muhtelif Barut Derinliği / Charge Depth (m) : 31.50 Ba Derinliği / Depth : 22.00 Groundwater Depth (m) :	KOORDİNAT Y / Coordinate Y (E-W) : 25 525.00 KOORDİNAT X / Coordinate X (N-S) : 104416.6 KOORDİNAT SİSTEMİ / Coordinate System : SONDAJ KUTU / Boring Direction (M) : BAŞLANGIÇ TARİHİ / Start Date : 16.10.2018 BİTİŞ TARİHİ / Finish Date : 16.10.2018 SONDOR / DRILLER : İLKER KAYA	



Yerel (Local) / Yerel (Local)	SPT ÇAKIL (SPT) / SPT Blows	Yerel (Local) / Yerel (Local)	SPT ÇAKIL (SPT) / SPT Blows	Yerel (Local) / Yerel (Local)	SPT ÇAKIL (SPT) / SPT Blows	Yerel (Local) / Yerel (Local)	SPT ÇAKIL (SPT) / SPT Blows
W1: Clayey sand	1-2	W2: Clayey sand	1-2	W3: Clayey sand	1-2	W4: Clayey sand	1-2
W5: Clayey sand	1-2	W6: Clayey sand	1-2	W7: Clayey sand	1-2	W8: Clayey sand	1-2
W9: Clayey sand	1-2	W10: Clayey sand	1-2	W11: Clayey sand	1-2	W12: Clayey sand	1-2
W13: Clayey sand	1-2	W14: Clayey sand	1-2	W15: Clayey sand	1-2	W16: Clayey sand	1-2
W17: Clayey sand	1-2	W18: Clayey sand	1-2	W19: Clayey sand	1-2	W20: Clayey sand	1-2
W21: Clayey sand	1-2	W22: Clayey sand	1-2	W23: Clayey sand	1-2	W24: Clayey sand	1-2
W25: Clayey sand	1-2	W26: Clayey sand	1-2	W27: Clayey sand	1-2	W28: Clayey sand	1-2
W29: Clayey sand	1-2	W30: Clayey sand	1-2	W31: Clayey sand	1-2	W32: Clayey sand	1-2
W33: Clayey sand	1-2	W34: Clayey sand	1-2	W35: Clayey sand	1-2	W36: Clayey sand	1-2
W37: Clayey sand	1-2	W38: Clayey sand	1-2	W39: Clayey sand	1-2	W40: Clayey sand	1-2
W41: Clayey sand	1-2	W42: Clayey sand	1-2	W43: Clayey sand	1-2	W44: Clayey sand	1-2
W45: Clayey sand	1-2	W46: Clayey sand	1-2	W47: Clayey sand	1-2	W48: Clayey sand	1-2
W49: Clayey sand	1-2	W50: Clayey sand	1-2	W51: Clayey sand	1-2	W52: Clayey sand	1-2
W53: Clayey sand	1-2	W54: Clayey sand	1-2	W55: Clayey sand	1-2	W56: Clayey sand	1-2
W57: Clayey sand	1-2	W58: Clayey sand	1-2	W59: Clayey sand	1-2	W60: Clayey sand	1-2
W61: Clayey sand	1-2	W62: Clayey sand	1-2	W63: Clayey sand	1-2	W64: Clayey sand	1-2
W65: Clayey sand	1-2	W66: Clayey sand	1-2	W67: Clayey sand	1-2	W68: Clayey sand	1-2
W69: Clayey sand	1-2	W70: Clayey sand	1-2	W71: Clayey sand	1-2	W72: Clayey sand	1-2
W73: Clayey sand	1-2	W74: Clayey sand	1-2	W75: Clayey sand	1-2	W76: Clayey sand	1-2
W77: Clayey sand	1-2	W78: Clayey sand	1-2	W79: Clayey sand	1-2	W80: Clayey sand	1-2
W81: Clayey sand	1-2	W82: Clayey sand	1-2	W83: Clayey sand	1-2	W84: Clayey sand	1-2
W85: Clayey sand	1-2	W86: Clayey sand	1-2	W87: Clayey sand	1-2	W88: Clayey sand	1-2
W89: Clayey sand	1-2	W90: Clayey sand	1-2	W91: Clayey sand	1-2	W92: Clayey sand	1-2
W93: Clayey sand	1-2	W94: Clayey sand	1-2	W95: Clayey sand	1-2	W96: Clayey sand	1-2
W97: Clayey sand	1-2	W98: Clayey sand	1-2	W99: Clayey sand	1-2	W100: Clayey sand	1-2



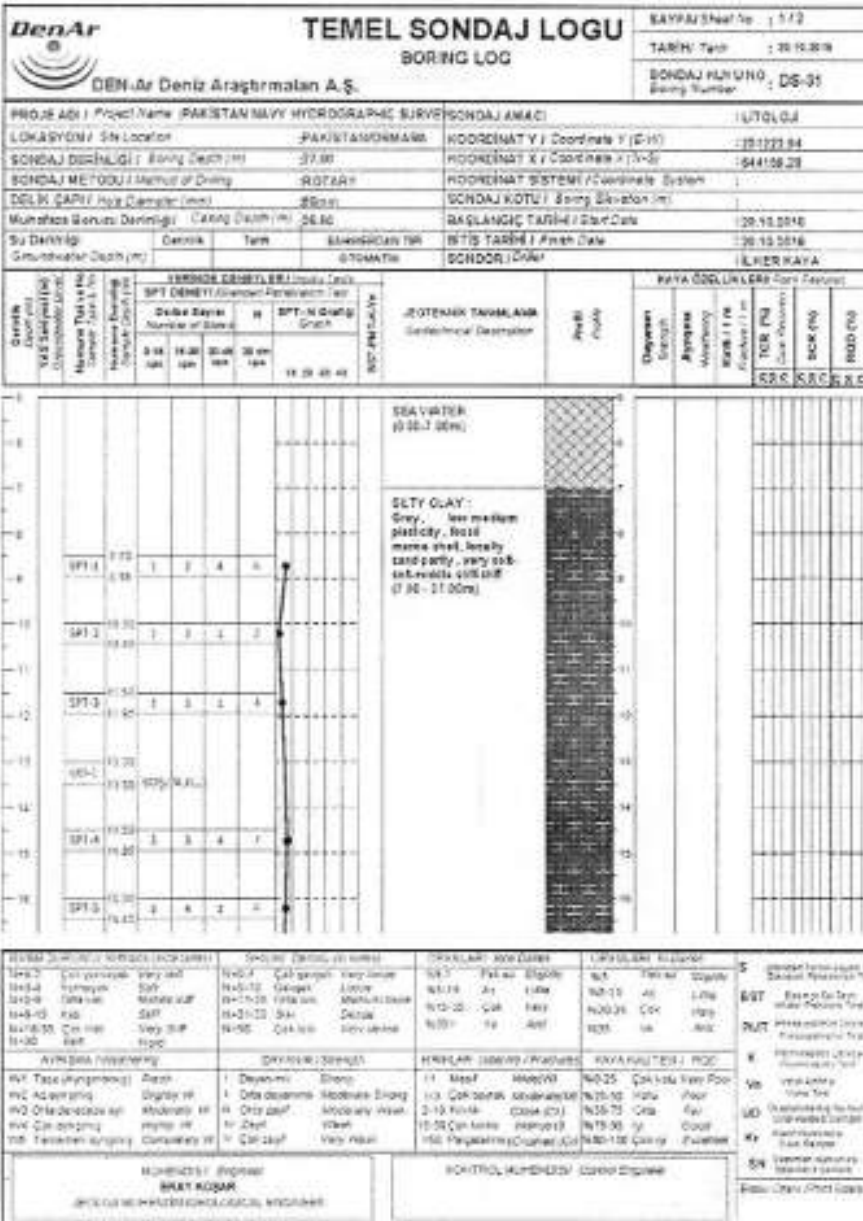


Fig-4.8/A



APPENDIX V TO ANNEX – A

GUIDLINE / RESPONSIBILITIES OF ENGINEER – ONH DREDGING WORKS

1. NHM(O) will be engineer for the Dredging of ONH for administrative activities. The responsibilities and guidelines for Engineer are enumerated below, he is to:

- a. Act as the engineer of the dredging project for admin and logistics arrangements primarily.
- b. Supervise the dredging works and to share progress reports on weekly basis.
- c. Ensure/regulate movement of shipping during dredging work.
- d. Ensure appropriate means of communication with contractor/firm platforms at all times. Detail instructions for communication shall be issued to contractor by NHM (O) before the start of dredging works.
- e. Ensure/ regulate PN shipping traffic in a way, which will not disturb contractor /firm's work more than 2-3 hours within 24 hours but not more than 20 hrs a week.
- f. Any delay of more than 3 hrs occurs (due to PN shipping traffic/ or any other PN activity) in dredging work are to be properly logged both by reps of the contractor and Engineer NHM (O) on separate log. **Both logs will be signed by each party (Contractor & Engineer NHM (O)) on the same day to avoid any disagreement.**
- g. Initiate progress report on weekly basis, covering details of each day.
- h. Keep proper check on dredging crew or staff of contractor and keep their movement restricted at all times only to authorized area.
- j. Ensure that the PN area remains in shipshape condition during dredging works. Same is to be regulated/ensured through contractor/firm.

k. Ensure that site provided to contractor/ firm for temporary establishment of working offices, remain in shipshape condition at all times by the contractor.

ax. Ensure availability of transport facility for NHO rep during survey/ dredging works.

all. Ensure no damage to existing infrastructure (roads, channel buoys beacons, wharves, underwater improvement works along South and East wharves, navigational lights etc) shall occur by the contractor/ firm (assets deployed/used for any other purpose) during dredging works. Same is to be reported accordingly.

n. Ensure that contractor/ firm's place appropriate Guard (sentry) in his site area to look after firm belonging/ asset at all time.

p. Ensure that guard/sentry placed by firm shall not carry any weapon (live or empty) during their duty.

q. Ensure that onshore dumping site is properly maintained and constructed by contractor/ firm (to avoid spilling of material in surrounding area).

r. Undertake/ maintain photographs of dredging works, dumping sites construction by contractor, site office area and all relevant activities of the dredging project.

s. Ensure that contractor provides detail of his vehicles which he will use during the dredging works (transporting men or stores)

t. Ensure that list of vehicles provided by contractor is placed at guard room to facilitate entry procedure. Appropriate gate passes will be issued for these vehicles and no vehicle other than approved will be allowed to enter ONH.

u. Ensure only security wise cleared men or crew shall be allowed to enter ONH. List of same may be acquired from contractor before start of dredging works.

v. Photography of (any sort) shall not be permitted to contractor or his employed crew except with the approval of Engineer.

2. The Engineer shall have no authority to amend the Contract.

APPENDIX I TO ANNEX B
INTEGRITY PACT

DECLARATION OF FEES, COMMISSION AND BROKERAGE ETC. 'PAYABLE BY THE SUPPLIERS OF GOODS, SERVICES & WORKS'

Contract Value:

Date:

Contract Title: **HIRING OF MAINTENANCE AND CAPITAL DREDGING SERVICES ORMARA NAVAL HARBOUR**

M/s _____ hereby declares, that it has not obtained or induced the 'procurement of any contract,' right, interest, privilege or other obligation or benefit from Government of Pakistan or any administrative sub-division or agency thereof or any other entity owned or controlled by it (GoP) through any corrupt business practice.

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

M/s _____ certifies that it has made and will make full disclosure of all

agreements and arrangements with all persons in respect of or related to the transaction with GoP and has not taken any action or will not take any action to circumvent the above declaration, representative or warranty.

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

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

Signature Employer/ Employer:

Name:

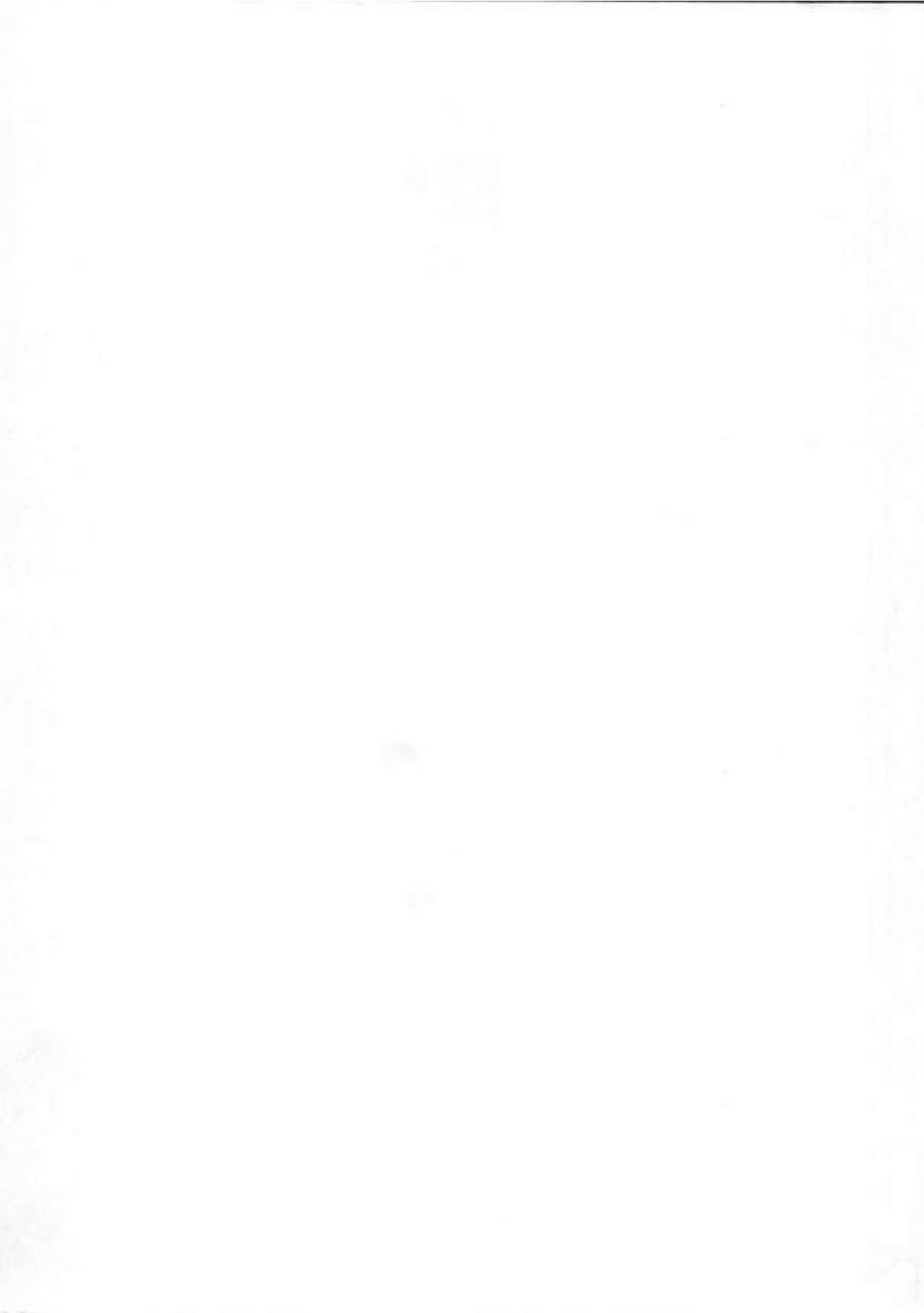
Designation:

Signature Contractor:

Name: Name: Mr. XYZ

Designation:

CNIC No: XXXXXXXX



COMPLETION CERTIFICATE

Contract No: _____

The Supplier: _____

The Purchaser: DIRECTORATE OF PROCUREMENT (NAVY)

1. Hereby it is to certify that the Milestone _____ has been completed in accordance with provisions of the contract.

2. The present certificate has been issued in four (4) originals on this day of _____
_____. The supplier and the Purchaser shall each hold two of these originals.

Rep of the Supplier

Rep of the Purchaser

BILL OF QUANTITIES

1. **PREAMBLE**

a. **General**

(1) The following Preambles are prepared for the guidance of the Bidder in pricing the works. Those Preambles appearing under the above heading of "General" apply to the whole of the Works required by the Contract. Preambles written under the remaining headings are to assist the Bidder in interpretation of the Bills of Quantities to which they refer but are not necessarily complete in themselves. The Bidder is to include within the prices for the items contained in the Bill of Quantities, for all the work both temporary and permanent in order to complete the Contract as shown on the Drawings or as detailed in the Specification, whether or not it is described in the Bill of Quantities or in the Preambles thereto. The Bidder shall enter his prices under the given items only in the Bills of Quantities in Pakistan Rupees and no other new items shall be included/ inserted in the Bill of Quantities.

(2) The quantities set down against the items in this Bill of Quantities are an approximate estimate of the quantity of each kind of work included in the Contract and are given for the convenience of forming a common basis for bidding. They are not to be taken as a guarantee that the quantities scheduled will be carried out or required or that they will not be exceeded. The Employer reserves the right to delete any item and/or increase/reduce quantities indicated in the Bill of Quantities at any time and price involved thereof will be adjusted.

(3) The quantities shall therefore not be considered as representing the final measurements, it being the intention of the Contract (except where otherwise specifically stated) that the actual quantities of work ordered and carried out shall be jointly measured on completion by the authorised representative of Employer and the Contractor and valued and paid for at such prices and rates entered by the Contractor in the Bill of Quantities.

(4) The Bidder must refer to the Specification and the Drawings to determine the full extent and requirement of the work to be priced. Any work which the Bidder considers is not covered by items in the Bill of Quantities should be included in the existing items price. No consideration will be given, after the Contract is let or during the course of the Contract, to any items not so listed either in any interim measurement for payment purposes or the measurement of Variations.

(5) The Bill of Quantities must be read with the Conditions of Contract, Drawings and the Specifications and the Bidder will have been deemed to have examined the Drawings (including Site Investigation data), Specification,

technical and general conditions of Contract and Bill of Quantities and acquainted himself with the Works to be done and the way in which they are to be carried out and all factors affecting the execution of the Works and to have provided in his Bid for everything necessary including any temporary works, over time, shift and tidal working required to complete the whole of the Works within the required period or as otherwise agreed and to maintain the Works all in accordance with the Contract.

(6) The Bidder will be held to have familiarised himself with all local conditions, insofar as they affect the work, means of access and the locality of existing services, in order to execute the Works measured and described hereinafter. No claims for want of knowledge in this respect will be reimbursed.

(7) The rates and prices set down against the items are to be the full inclusive value of the finished work shown on the Drawing and/or described in the Specifications or which can reasonably be inferred there from and to cover the cost of every description of Temporary Works executed or used in connection therewith and all the Contractor's obligations under the Contract including testing, giving samples and all matters and things necessary for the proper execution, completion and maintenance of the Works.

(8) In case of a discrepancy between the rate quoted in figures and in words, the rate quoted in words shall take precedence. In case of any arithmetical errors in the extensions (Quantity x Unit Rate) in the Bill of quantities, the unit rate and not the quoted amount shall prevail. Errors will be corrected by the Employer for any such arithmetical errors and Employer decision in this regard is final.

(9) Each individual item in the Bill of Quantities is to be priced or if any items are not priced it is to be indicated under which item or items the value of the work has been included. Items, the rates/prices of which are the same, shall not be bracketed. If the Contractor omits to price an item, the cost of the work of such item shall be deemed to be spread over and included in the prices/rates given for other items and the Contractor will be paid at zero rates for that item. Contractor shall not write against items "included" when the rate is asked for.

(10) The prices in the Bill of Quantities shall be the full inclusive value of the work including all costs and expenses which may be required in the dredging work described together with all liabilities and obligations set forth or implied in the Contract. Where an item is left unpriced it will be held that the Bidder has made due allowance for this in the rates and prices entered against other items. No claim for additional payment shall be allowed for any error or misunderstanding by the Contractor of the work involved.

(11) The **rates and prices** shall include, but not be limited to, the provision and/or and operation of the following items, for compliance with the Conditions of Contract, Particular Conditions, the specifications and the Drawings:

- a. All plant and equipment (optional plants & equipment shall also be included if required by the bidder for execution of dredging work).
- b. All labour, including supervision.
- c. All Contractor's accommodation, site offices, cabins, huts, maintenance workshops and storage facilities.
- d. All necessary temporary services including fresh water, compressed air lines, electrical cabling and switchgear, telephone, walkie-talkie and facsimile facilities.

- e. All temporary fencing, watching, lighting, sanitary accommodation, general security arrangements, welfare facilities and first aid provision.
- f. All safety equipment (including safety boat).
- g. All maintenance, security and welfare facilities.
- h. All materials, including handling and transportation, installation/erection, testing and commissioning.
- j. All temporary works.
- k. All navigation markers, buoys and lighting.
- ax. Working by day and night as is customary for this type of work.
- all. All supervision and management.
- n. Maintenance & restoration of all permanent roadways, access roads etc utilised by the Contractor, including all necessary traffic management.
- p. The protection from damage and making good any damage to existing services of any description.
- q. The protection of existing port markers, buoys and lights.
- r. Any delay due to weather and sea state or any delay not authorized by the Engineer.
- s. Obtaining any necessary licenses and the arrangement of all Notices to Mariners.
- t. All insurances.
- u. All taxes and duties including Sales Tax, General Tax, Import Duty, Customs Duty, etc.
- e. All overheads and profit and every incidental and contingent costs and charges whatsoever.
- w. Allowance for complying with all environmental requirements.

These items above shall include all associated costs of mobilisation, maintenance, de-mobilisation and all necessary resources.

(12) The Specifications and the various Sections in the Bill of Quantities are intended to cover the supply of all Materials and Plant and the execution of all works necessary to complete the Works. Should there be any details of Construction or Materials or Plant which have not been referred to in the Specifications or in the Bill of Quantities or the Drawings, but the necessity for which may reasonably be implied or inferred there from, or which are usual, or essential to the completion of all works in all trades, the same shall be deemed to be included in the rates and prices within the Bills of Quantities. The rates and prices shall cover the items as described in the Bill of Quantities and if there is inconsistency between the Bill of Quantities, Specifications or the Drawings, the description in the Specifications shall prevail.

(13) It is the Bidder's responsibility to ascertain for him the probable states of tides, their levels, times and durations. Any water levels stated above and marked on the Drawings are intended to give an indication only of those likely to be encountered.

(14) All rates are to be inclusive of work at the levels required taking into account the underwater work, tides and weather conditions. They are to include for any stopping of work by the Employer's rep/Engineer under conditions stated in the Specifications in the indent.

(15) All costs associated with carrying out designs, preparing drawings, schedules and manuals, and submissions for the Engineer's approval where these are specified to be done by the Contractor, shall be deemed to be included in the rates and prices. Items for plant and equipment and systems specified to be designed by the Contractor shall be deemed to

include for all work necessary to ensure compliance with the performance requirements of the Specification.

(16) All costs associated with complying with the Conditions of Contract and any other legal requirements applicable to the Works shall be included in the rates and prices inserted by the Contractor in the Bill of Quantities.

(17) The drawings for bid purposes are indicative only of the work to be carried out. However, the Bidder must allow within his price for the items of work included in the Bid Documents for the details which will appear on subsequent drawings developed for construction purposes and which from the Bidders experience of this type of work would be expected to be required.

(18) The estimated quantities in the Bill of Quantities are based on nominal dimensions and levels shown on the Drawings. The Bidder shall therefore make due allowance in his own estimate of quantities and/or in his rates to achieve the nominal dimensions and levels within those tolerances stated on the Drawings and in the Specification. The tolerance of any kind / type shall not be paid.

(19) The platforms / equipment in no case shall be inferior than mentioned in the tender documents. However, it is contractor liability to bring the capable & or higher capacity dredging platforms / equipment to dredge required type of strata within stipulated time frame for the required scope of work. The contractor may bring additional platforms at his own risk and cost to complete work in the given time frame.

b. **Variations**

Where the Employer/rep instructs Variations in the Work for any of the specified Works, then such Works shall be measured and valued in accordance with the Contract. The basis for any such evaluation shall be the Bill of Quantities.

c. **Dredging**

(1) The rates for dredging shall cover operating and maintaining the Contractors Plant and Equipment, dredging to the required levels, loading the dredged or excavated material onto barges/craft, ready for transport to the disposal site.

(2) **The rates for the dredging and excavation are for dredging in any material from soft deposits to composite strata.** The Contractor must assess the strength of the material from the Ground Investigation data as well from its own experience and also must allow the plant and equipment adequate to carry out the work. No claim would be entertained to dredge the material.

(3) Demurrage or standing time will not be paid in respect of any delays due to adverse weather, conditions of tide, waiting for daylight, breakdowns, non-availability of channel/basin due to shipping movement etc.

(4) Dredging and excavation shall be measured net to the lines and levels shown on the Drawings or as varied by order of the Employer/Rep. No payment will be made in respect of materials dredged beyond the specified levels or specified side slopes.

(5) Hydrographic survey and HYPACK software (as per method finalized by the Employer's rep) of computing the results of the survey shall be used for computing dredging volumes.

(6) Rates for dredging but not limited to, shall include;

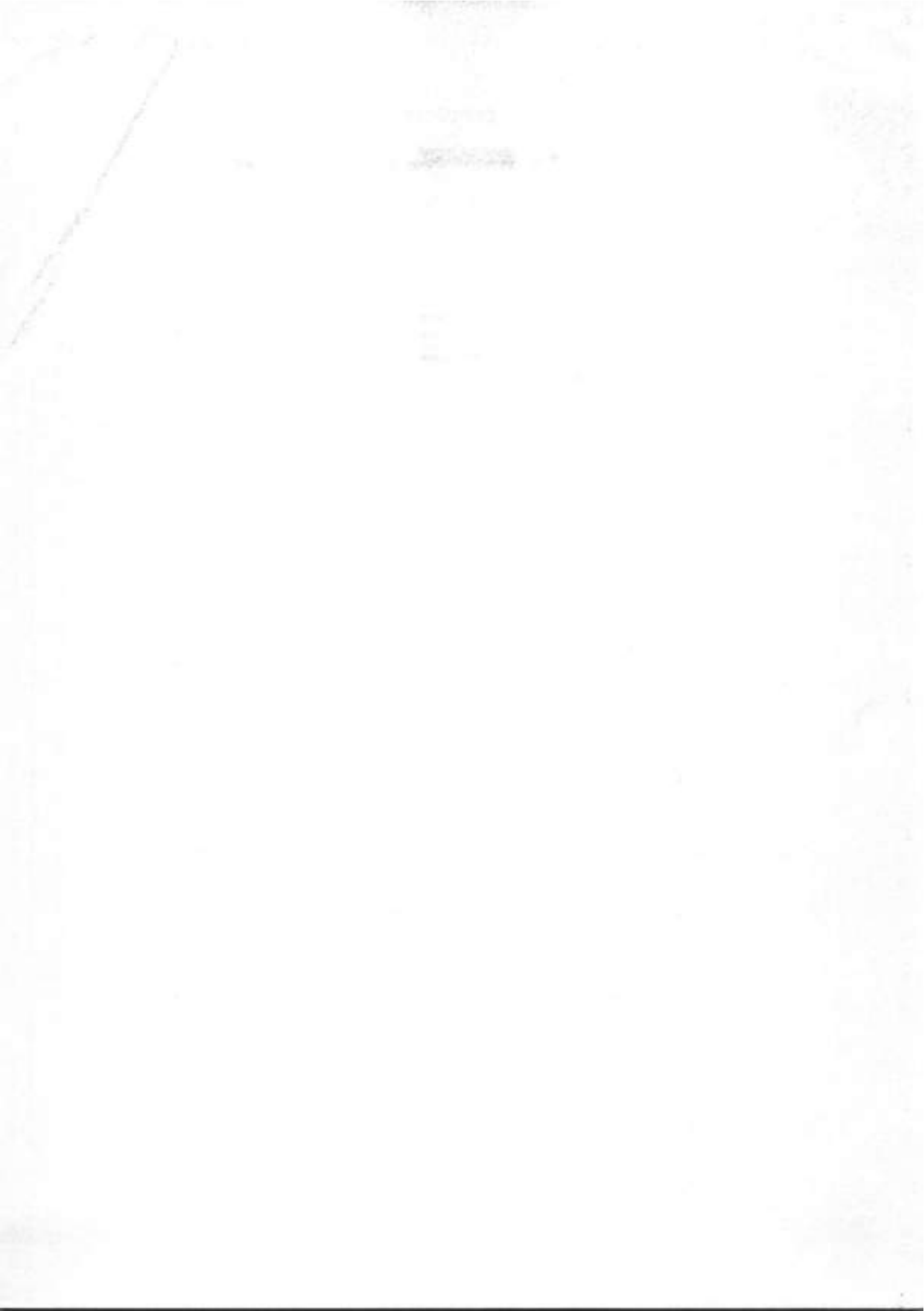
a. Dredging to achieve the dredge depths and areas shown on the Drawings and to the specified tolerances.

b. Disposal of dredged material to an approved disposal area and paying all associated charges.

d. **Bill of Quantities**

(1) The bidders shall offer rates for their proposal under separate BOQs as per attached samples **Appendix I to Appendix II of Annex B.**

(2) Sample letter of Price Bid is placed at **Appendix II to Appendix II of Annex B.**



CAPITAL AND MAINTENANCE DREDGING ORMARA NAVAL HARBOUR

BILL No. 1.0 GENERAL

BILL 1.0 - UNIVERSAL ITEMS

ITEM	DESCRIPTION	UNIT	ESTIMATED	RATE	AMOUNT TOTAL
			QUANTITY	PKR	PKR
	Contractual Requirements				
1.0.1	Record Documents	Sum	3	Included	Included
1.0.2	As-Built Drawings	Sum	3	Included	Included
	<i>General</i>				
1.0.3	Sets of Progress Photographs /report (every 02 week) No,		4		
Page total carried to BILL 1.1 Summary (excluding sale tax)					
BILL 1.0 Summary carried to GRAND SUMMARY (Excluding sales tax)					

MAINTENANCE AND CAPITAL DREDGING ORMARA NAVAL HARBOUR

BILL No. 2.0 SURVEYS

ITEM	DESCRIPTION	UNIT	ESTIMATED QUANTITY	RATE PKR	AMOUNT TOTAL PKR
2.1	Pre-Dredging Works Survey	Sum	1	Included	Included
2.2	Interim Dredging works Survey (02 in Number)	Sum	2	Included	Included
2.3	Post-Dredging Works Survey	Sum	1	Included	Included
2.4	Pre & Post disposal area surveys	Sum	2	Included	Included
2.6	Side Scan sonar Survey	Sum	1	Included	Included
2.7	Multi-Beam Survey	Sum	1	Included	Included
2.8	Magnetometer Survey	Sum	1	Included	Included

Page total carried to BILL 2.0 Summary (Excluding Sales Tax) 0.00

BILL 2 Summary carried to GRAND SUMMARY (Excluding Sales Tax) 0.00

MAINTENANCE AND CAPITAL DREDGING ORMARA NAVAL HARBOUR

BILL No. 3.0 DREDGING

ITEM	DESCRIPTION	UNIT	ESTIMATED QUANTITY	RATE PKR	AMOUNT TOTAL PKR
	DREDGING OF ORMARA NAVAL HARBOUR NEW BASIN INCLUDING SLOPES				
3.1	New Basin area including Slopes	m ³	2.8M		
	DREDGING OF EXISTING CHANNEL AND BASIN INCLUDING SLOPES				
3.2	Channel and Basin area	m ³	1.2M		
	Provisional Items				
	<u>Standing time on the instructions of the purchaser</u>				
3.3	Dredging Plants: (Bidder to specify)	hrs			
Page total carried to BILL 3.0 Summary (Excluding sales Tax)					
BILL 3 Summary carried to GRAND SUMMARY (excluding Sales Tax)					

MAINTENANCE AND CAPITAL DREDGING ORMARA NAVAL HARBOUR

BILL No. 4.0 DAYWORKS SCHEDULE

BILL 4.1 - SCHEDULE FOR LABOUR/ CREW ON DAYWORKS

ITEM	DESCRIPTION	UNIT	ESTIMATED QUANTITY	RATE PKR	AMOUNT PKR	TOTAL
	Bidder to specify and enter rates for all labour to be used on the Works below:					
4.1.1	Unskilled crew	hrs				
4.1.2	Skilled crew	hrs				
4.1.3	Diving Team Including Equipment	hrs				
4.1.4	Supervisor/Foreman	hrs				
4.1.5	Safety Officer	hrs				
4.1.6	Drivers (Bidder to specify)	hrs				
4.1.7	General Plant Operatives (Bidder to specify)	hrs				
4.1.8	Tug & Work Boat Operatives (Bidder to specify)	hrs				
4.1.9	Dredging Plant Operatives (Bidder to specify)	hrs				
4.1.10	Others (Bidder to specify)	hrs				
4.1.11	Percentage for overheads on Daywork Labour	%				

Page total carried to BILL 4.1 Summary (Excluding slaes Tax)

Bill 4.1 Summary carried to GRAND SUMMARY (Excluding Sales Tax)

MAINTENANCE AND CAPITAL DREDGING ORMARA NAVAL HARBOUR

BILL No. 4.0 DAYWORKS SCHEDULE

BILL 4.2 - SCHEDULE FOR PLANT ON DAYWORKS

ITEM	DESCRIPTION	UNIT	ESTIMATED QUANTITY	RATE PKR	AMOUNT TOTAL PKR
	Bidder to specify and enter rates for all plant to be used on the Works below:				
4.2.1	General Tools & Small Plant (Bidder to specify)	hrs			
4.2.2	Compressors (Bidder to specify)	hrs			
4.2.3	Pumps (Bidder to specify)	hrs			
4.2.4	Tug & Work Boats (Bidder to specify)	hrs			
4.2.5	Dredging Plant at Basin area (Bidder to specify)	hrs			
4.2.6	Dredging Plant at Channel area (Bidder to specify)				
4.2.7	Other (Bidder to specify)	hrs			
4.2.8	Percentage for overheads on Daywork Plant	%			
Page total carried to BILL 4.2 Summary (Excluding sales Tax)					
Bill 4.2 Summary carried to GRAND SUMMARY (Excluding Sales Tax)					

MAINTENANCE AND CAPITAL DREDGING ORMARA NAVAL HARBOUR

BILL No. 5.0 PROVISIONAL SUM

ITEM	DESCRIPTION	UNIT	ESTIMATED QUANTITY	RATE PKR	AMOUNT TOTAL PKR
	<i>The following provisional sums are included for the execution of work or for the supply of goods, materials or services or for contingencies which sums may be used in whole or in part or not at all at the direction and discretion of the Engineer</i>				
5.1	contingencies to be expected deducted in whole	sum			

Page total carried to BILL 5 Summary (Excluding sales Tax)

Bill 5 Summary carried to GRAND SUMMARY (Excluding Sales Tax)

MAINTENANCE AND CAPITAL DREDGING ORMARA NAVAL HARBOUR

GRAND SUMMARY		
ITEM	UNIT	AMOUNT TOTAL PKR
BILL No. 1.0 GENERAL		
BILL 1.1 - Universal Items	PKR	
BILL No. 2.0 SURVEYS	PKR	
BILL No. 3.0 DREDGING	PKR	
BILL No. 4.0 DAYWORKS SCHEDULE		
BILL 4.1 - Schedule For Labour/Crew on Dayworks	PKR	
BILL 4.2 - Schedule For Plant on Dayworks	PKR	
BILL 5.0 - PROVISIONAL SUM	PKR	
Grand Total PKR (Excluding Sales Tax)		
Taxes		AMOUNT TOTAL PKR
Grand Total PKR (Including all Taxes)	PKR	

LETTER OF PRICE BID

To:

DP (Navy)

We, the undersigned, declare that:

- a. We have examined and have no reservations to the Bidding Documents
- b. The total price of our Bid, excluding any discounts offered in item (c) below is:
- c. The discounts offered and the methodology for their application are:
- d. Our Bid shall be valid for a period of _____ days from the date fixed for the bid submission deadline in accordance with the Bidding Documents, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- e. If our Bid is accepted, we commit to obtain a performance bank guarantee in accordance with the Bidding Documents;
- f. We do hereby declare that the Bid is made without any collusion, comparison of figures or arrangement with any other bidder for the Works.
- g. We understand that you are not bound to accept the lowest evaluated bid or any other bid that you may receive.
- h. We agree to permit Employer or its representative to inspect our accounts and records and other documents relating to the bid submission and to have them audited by auditors. This permission is extended for verification of any information provided in our Price Bid which comprises all documents enclosed.

(i) If awarded the contract, the person named below shall act as Contractor's Representative.

Name

In the capacity of

Signed

Duly authorized to sign the Bid for and on behalf of

Date

Address

(To be executed on a Judicial Stamp Paper of appropriate value)

NON-DISCLOSURE AGREEMENT

This Agreement ("**Agreement**") is made at NHQ, at Islamabad on this ____ day of ____ 2026 by and between

1. Director Procurement Navy an organization working under Pakistan Navy, having its office at Naval Headquarters, Sector E-8, Islamabad, Pakistan (hereinafter referred to as the "**Disclosing Party**" which expression shall, unless repugnant to the context or meaning thereof, be deemed to mean and include its successors and permitted assigns) of the **First Part**;

AND

2. M/s _____ address _____ (hereafter referred to as "**Receiving Party**"), which expression shall, unless repugnant to the context or meaning thereof, be deemed to mean and include its successors and permitted assigns) of the **Second Part**;

The Disclosing Party and the Receiving Party shall hereinafter collectively be referred to as the "**Parties**" and individually as a "**Party**".

WHEREAS

A. The Disclosing Party is engaged in the business of providing import, marketing, sale of _____;

B. The Receiving Party is involved in the business of _____;

C. The Disclosing Party is entering into a business relation with the Receiving Party during the course of which certain Confidential Information shall be shared or come to the knowledge of the Receiving Party;

D. In consideration of the mutual promises and Agreement between the Parties hereto, the Parties have agreed to enter into this Agreement to govern the terms and conditions of their association.

NOW THEREFORE IT IS HEREBY AGREED BY AND AMONGST THE PARTIES AS UNDER

1. CONFIDENTIAL INFORMATION

a. For the purpose of this Agreement, the terms "**Confidential Information**" shall mean such information relating to the Disclosing Party as the Disclosing Party may from time to time provide to the Receiving Party under or relating to this Agreement including all information communicated in writing or orally relating to business affairs, any technical data, or know-how, including but not limited to, that which is or relates to:

- (1) Inventions, ideas, processes, research, formats, formulas, human readable code on any media, object code, data, programs, specifications, other works of authorships, improvements, discoveries, development, designs and techniques;
- (2) Product plans, products, services, customers, markets, software, developments, inventions, processes, designs, drawings, engineering, hardware configuration information;
- (3) Non-public market information, product plans;
- (4) Marketing or finances of the company in any form, customer information, business plans and strategies, price lists and market studies;
- (5) Contracts and client database, computer models and programs, research records, statistical methods of doing business, customers, finances, strategic, and marketing plans, employee details and such other proprietary information relating to the business of the Disclosing Party and is not in the public domain.

2. NON-DISCLOSING AND CONFIDENTIALLY

a. The Receiving Party recognizes that in the course of its discussions with the Disclosing Party it shall be privy to Confidential Information relating to the Disclosing Party. Accordingly, the Receiving Party agrees and undertakes:

1. That the Receiving Party shall not, without the prior written permission of the Disclosing Party, directly or indirectly disclose or cause to be disclosed any Confidential Information to any third party;
2. That the Receiving Party shall take all steps as may be reasonably necessary to protect the integrity of the Confidential Information and to ensure against any unauthorized disclosure thereof;

3. That the Receiving Party shall promptly inform the Disclosing Party of any accidental disclosure of Confidential Information and shall take all steps, together with the Disclosing Party, to retrieve and protect the Confidential Information; and

(d) That the Receiving Party shall use the Confidential Information only for the purpose for which it was provided and shall not profit from the same in any unauthorized manner.

b. The Receiving Party shall strictly adhere to the provisions mentioned above except:

1. To the extent that such Confidential information is already in the public domain, other than by breach of this Agreement;

2. To the extent that such Confidential information is required to be disclosed by any applicable law or any applicable regulatory requirements or by any regulatory body to whose jurisdiction the Receiving Party is subject or with whose instructions it is customary to comply under notice to the Disclosing Party;

(3) In so far as it is disclosed to the employees, directors, partners, financiers or professional advisors of the Receiving Party, provided that the Receiving Party shall procure that such persons treat such Confidential Information as Confidential; and

(4) To the extent that any of such Confidential Information was previously known or already in the lawful possession of the Receiving Party, prior to disclosure by the Disclosing Party.

c. The Receiving Party shall not, except as and to the extent required, make any copies or reproduce the Confidential Information. Such copies or reproductions shall be subject to the terms and conditions of this Agreement and the Receiving Party shall take such steps as are necessary to restrict access to and protect the Confidentiality of such copies or reproductions of the confidential Information.

3. INJUNCTIVE RELIEF

The Parties acknowledge that due to the extent of the disclosure of the confidential Information to the Receiving Party, the Receiving Party understands that the Disclosing Party shall suffer irreparable damage if the Receiving Party breaches any of its obligations under this Agreement and that monetary damages shall be inadequate to compensate the Disclosing Party. Consequently, the Receiving Party acknowledges that, in addition to any other remedies of rights, the Disclosing Party shall have the Right to obtain injunctive relief to enforce the terms of this Agreement.

4. DISPUTES RESOLUTION AND GOVERNING LAW

a. Any dispute arising in connection with this Agreement shall be referred to arbitration of a sole arbitrator to be appointed by the Parties. The place of arbitration shall be Karachi, Pakistan. The arbitration proceeding shall be governed by the Arbitration and Conciliation Act, 1940 and shall be in English language. The arbitrators/ arbitral panel shall also decide on the cost of the arbitration proceedings.

b. This Agreement shall be governed in accordance with the laws of Pakistan and shall be subject to the jurisdiction of the High court set in Islamabad/ Karachi.

5. RESERVATIONS OF RIGHTS

No forbearance, indulgence, relaxation or inactions by the Disclosing Party at any time, to require performance of any of the provisions of this Agreement shall, in anyway, affect, diminish or prejudice its right to require performance of that provision at a later point in time.

6. PARTIAL INVALIDITY

If any provision of this Agreement is held to be invalid or unenforceable to any extent, the remainder of this Agreement shall not be affected and each provision of this Agreement shall be valid and enforceable to the fullest extent permitted by law. Any invalid or unenforceable provision of this Agreement shall be replaced with a provision which is valid and enforceable and most nearly reflects the original intent of the unenforceable provision.

7. INDEMNIFICATION

The Receiving Party hereby provides complete indemnity to the Disclosing Party for any loss or damage caused to the Disclosing Party or any of its affiliates and assignees due to breach of obligations of the Receiving Party under this Agreement.

8. NO LICENSE

All confidential information shared under this Agreement shall remain the exclusive property of the Disclosing Party, and the Receiving Party shall have no rights, by license or otherwise, to use the confidential information except as expressly provided herein. No patent, copyright, trademark or other proprietary right is licensed, granted or otherwise conveyed by this Agreement with respect to the confidential information to the Receiving Party.

9. TERM AND TERMINATION

a. This Agreement and the pledge of Confidentiality shall remain in effect till the time the Parties mutually agree on cancelling it.

b. Either Party shall not terminate this agreement without consent of the other Party. In the event of termination, the obligations of Non-Disclosure of the Parties here under shall survive.

10. RETURN OF CONFIDENTIAL INFORMATION

The Receiving Party agree to return to the Disclosing Party or destroy, and verify in writing its destruction, all written, tangible or otherwise accessible material in any form (including electronic media such as computer diskettes, CD-ROM, flash drives/USB's, electronic copies or any material resident in the hard or external drives of any computer) containing or reflecting any confidential Information (including all copies, summaries, excerpts, extracts or other reproductions) promptly following the Disclosing Party's request or termination, as the case may be. At the Disclosing Party's option, the Receiving Party shall provide written certification of compliance with this Clause. Failure to return the confidential information by local firm shall be dealt i.a.w the Official Secret Act, 1923.

11. CORRESPONDENCE

Each Party hereby designate the following persons for the transmission of confidential Information and for recording its disclosure and receipt here under:

For Disclosing Party

Name:

Name:

Address:

Address:

Contact No.

Contact No.

Email:@.....

Email:@.....

For Receiving Party

Name:

Address:

Tel. No.....

Email:

IN WITNESS WHEREOF THE PARTIES HERETO HAVE SET AND SUBSCRIBED THEIR RESPECTIVE HANDS TO THESE PRESENTS ON THE DAY, MONTH AND YEAR HEREIN ABOVE MENTIONED:

Witnesses:

1.

2.

Name: _____

Name: _____

Address: _____

Address: _____

CNIC: _____

CNIC: _____

Sample Form

DETAIL OF PROPOSED DREDGER/ EQUIPMENT/ PLANT/ BARGES/ WORK BOATS/ SURVEY BOAT SHALL PREFERABLY NOT OLDER THAN 20 YEARS

S. No.	Particulars Required	Specifications to be used for the works
1.	Name of Equipment/ Plant	
2.	Country of registration	
3.	Type	
4.	Name of Builder	
5.	Year built	
6.	Length Overall	

--	--	--	--	--	--	--

Note:

The above hire rates / hr include fuels and consumable stores, overhead charges, profit, maintenance, servicing and all other costs expenses and charges, etc.

Signature: _____

Name: _____

Date: _____

Sample Form

DETAIL OF PROPOSED DREDGER/ EQUIPMENT/ PLANT/ BARGES/ WORK BOATS/ SURVEY BOAT SHALL PREFERABLY NOT OLDER THAN 20 YEARS

S. No.	Particulars Required	Specifications to be used for the works
1.	Name of Equipment/ Plant	
2.	Country of registration	
3.	Type	
4.	Name of Builder	
5.	Year built	
6.	Length Overall	
7.	Breadth Overall	
8.	Maximum draught loaded (where applicable)	
9.	Capacity of Hopper (where applicable)	
10.	Speed of dredgers Propelling machine	
11.	Type of Engine	
12.	Maker's Name	
13.	Output of Engine	
14.	Maximum dredging depth	

15.	Minimum dredging depth	
16.	Min dredging productivity per hour/ per day.	
17.	Working hour per week, on which tender is based	
18.	Output per week in silty/sandy material	
19.	Hire rate of dredger, including labour, running and all other expenses and overhead when working per hour.	
20.	Location of Dredger at the time of submission of Tender	
21.	Discharge mechanism	

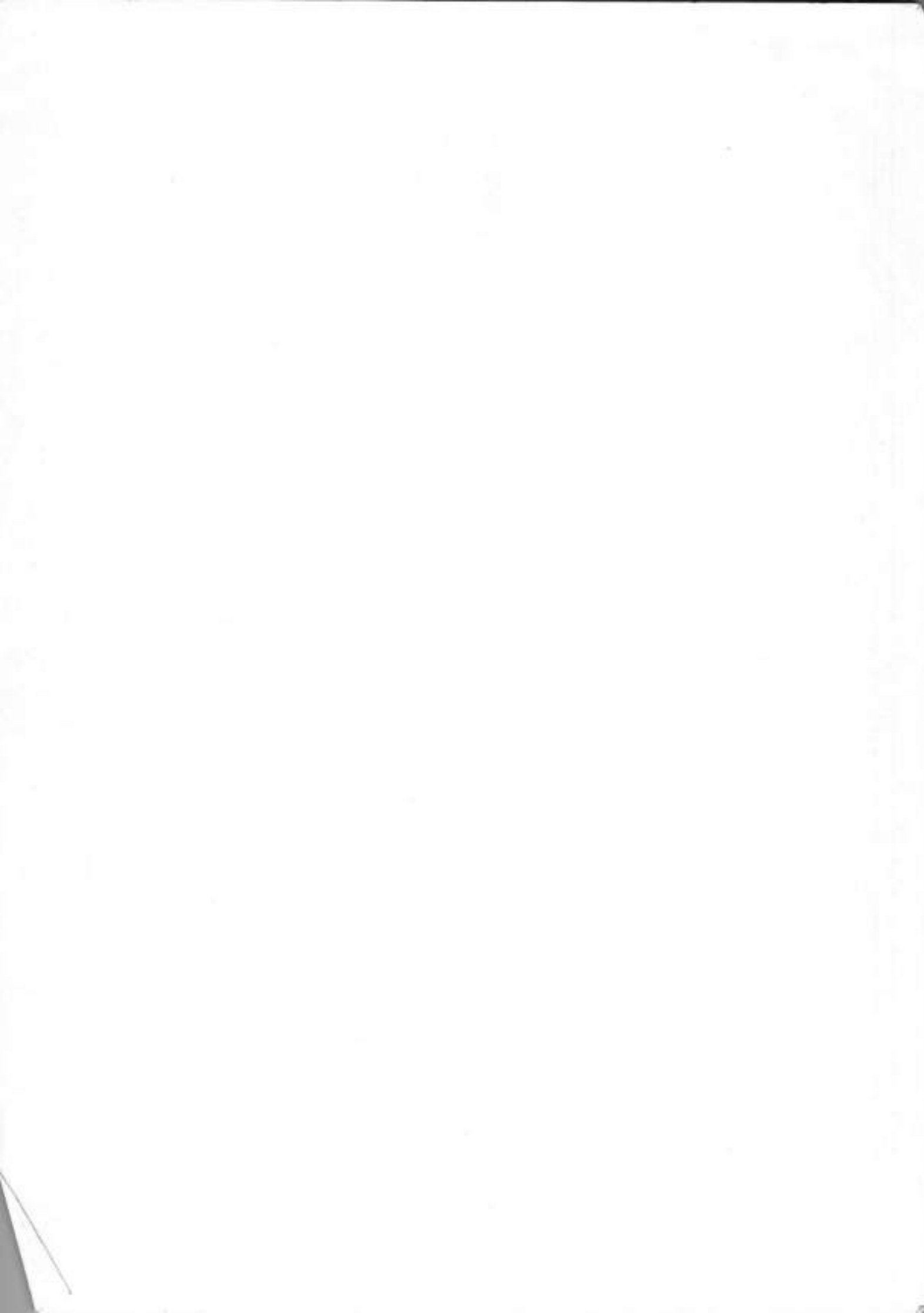
Note-1 The above is the minimum specs for the purpose of evaluation of the bids. The contractor is responsible to bring the equipment/ dredging plant(s) (may be higher capacity/ power) to complete the project in stipulated timeframe.

Note-2 The contractor shall provide details of each equipment/ plant as per sample form use for dredging project providing all relevant details of its make model, capacity, max productivity, age, certifications, hiring rates etc. for bid evaluation.

Signature: _____

Name: _____

Date: _____



NECESSARY DATA FOR ISSUANCE OF CONTRACTS ON EARNEST MONEY

IMPORTANT

Each column must be filled in with BLOCK CAPITAL LETTERS,
incompletion shall render disqualification.

1. Name : _____
2. Father's Name : _____
3. Address (Residential) :

4. Designation in Firm :

5. CNIC : _____
(Attach Copy of CNIC)
6. NTN : _____
(Attach Copy of NTN)
7. Firm's Address :

8. Date of Establishment of Firm :

9. Firm's Registration Certificate with FBR/Chamber of Commerce/Registrar of Companies.
(Attach Copy of relevant CERTIFICATE)
10. In case PARTNERSHIP (Attach particulars at serial 1,2,3,4,5 and 6 of each partner).

(Kindly fill in the above form and forward it under your own letter head with contact details)



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(Attach Copy of relevant CERTIFICATE)
10. In case PARTNERSHIP (Attach particulars at serial 1,2,3,4,5 and 6 of each partner).

(Kindly fill in the above form and forward it under your own letter head with contact details)

