

DEENDAYAL PORT AUTHORITY



TENDER DOCUMENTS FOR

**Dredging in the Navigational Channel, Kandla Creek &
Alongside cargo berths/ Oil jetties at Deendayal Port
Authority for the year 2024-27”.**

OFFICE OF THE DY.CHIEF ENGINEER (H&D)

DEENDAYAL PORT AUTHORITY

PO. BOX NO. 50,

AO. BUILDING,

GANDHIDHAM (KACHCHH)

December' 2023

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Section 1

NOTICE INVITING TENDER (NIT)

DEENDAYAL PORT AUTHORITY

NOTICE INVITING TENDER

Tender No. 03-H&D/2023.
ONLINE TENDERING (E- Tendering)

NAME OF WORK: Dredging in the Navigational Channel, Kandla Creek & Alongside cargo berths/ Oil jetties at Deendayal Port Authority for the year 2024-27".

Tenders in E-tendering system are invited by **Dy. Chief Engineer (H & D)** for the above work as per the details given in the table below.

Work Description	Tender Fee (In Rs.)	Estimated cost (In Rs.)	EMD (In Rs.)	Date of Pre- Bid Meeting	Last Date and time of online Submission of bid documents	Date and time of online opening of Technical bids
Dredging in the Navigational Channel, Kandla Creek & Alongside cargo berths/ Oil jetties at Deendayal Port Authority for the year 2024-27	Rs. 15000 (plus 18% GST) To be paid in digital mode of payment. Details are mentioned below: - online transfer in Bank of Baroda, Gandhidham Branch, Account No: 100801000224 27, IFSC Code: BARB0GANK UT	4087.39 million (excluding GST)	Rs. 50 lakhs in the form of Bank Guarantee issued by any having branch at Gandhidham as per format in the tender documents.	12/01/2024 @ 11 HRS	29/01/2024 @16:00 HRS	29/01/2024 @16:30 HRS

Detailed notice inviting tender along with complete tender documents can be downloaded from website <https://kpt.nprocure.com> from 29/12/2023 to 29/01/2024 @ 16:00hrs. Tender Notice is also available on <https://www.deendayalport.gov.in> and <https://eprocure.gov.in>. Technical Bid will be opened on 29/01/2024 @ 16:30 hrs. Date of opening of price bid shall be notified after scrutiny & evaluation of Technical Bid. For further details and general enquiries prospective bidders may contact Dy. Chief Engineer (H&D), (Email: dredgingdpt@gmail.com) Room No. 111, Ground Floor, A.O. Building, Gandhidham-370201, Kutch District, Gujarat State, INDIA, Mob: 94272 51059 during working hours before the last date and time of downloading of tender documents.

DY. CHIEF ENGINEER (H&D)
DEENDAYAL PORT AUTHORITY

E - TENDER NOTICE NO. 03-H&D/2023

E-tenders are invited by DEENDAYAL PORT AUTHORITY from reputed domestic companies as well as legally valid and willing to undertake the "Dredging in the Navigational Channel, Kandla Creek & Alongside cargo berths/ Oil jetties at Deendayal Port Authority for the year 2024-27" by deploying suitable dredgers as per tender conditions (Trailer suction hopper Dredger (TSHD)/Backhoe Dredger (BHD)/cutter suction dredgers (CSD) / Grab Dredger etc.) under THREE cover system offers in the prescribed form are to be submitted in duplicate.

NAME OF WORK	DREDGING IN THE NAVIGATIONAL CHANNEL, KANDLA CREEK & ALONGSIDE CARGO BERTHS/ OIL JETTIES AT DEENDAYAL PORT AUTHORITY FOR THE YEAR 2024-27".
Estimated cost	Rs. 4087.39 million (Excluding GST)
Completion Period	3 years (36 months)
Bid type	Open E - tender
COST OF TENDER DOCUMENT (NON REFUNDABLE)	Tender Fees (Non-refundable) of Rs. 15000 plus 18% GST by online transfer. The details are as under. Deendayal Port Authority, Account No.: 10080100022427 Name of Bank & Address: Bank of Baroda, Gandhidham branch, IFSC code: BARB0GANKUT
Bid Security	Rs. 50 Lakhs in form of B.G drawn in favour of Board of DPA, issued by nationalize/scheduled bank (except Co-operative bank) having branch at Gandhidham
Minimum eligibility criteria	<p>Any individual / proprietorship firm / Partnership Firm / Company who are having Dredging work experience as mentioned in similar work definition in tender document are eligible to participate.</p> <ol style="list-style-type: none">1. Average annual financial turnover during the last three years ending 31st March of the previous financial years, should be at least Rs. 408.80 million (excluding GST). CA certified document for financial turnover details to be uploaded failing which bid will be considered non-responsive. (Therelevant Audited Balance Sheets and profit and loss statement certified by Chartered Accountant for meeting qualification criteria shall be submitted along with tender).2. Experience of having successfully completed similar works during last 7 years ending last day of month previous to the one in which applications are invited should be either of the following: Three similar completed dredging work of value, each work costing not less than Rs. 545 million (excluding GST/ VAT) or involving dredging quantity of 2.89M. Cum quantity.

or

Two similar completed dredging work of value, each work costing not less than **Rs. 681.25 million excluding GST/VAT)** or involving dredging quantity of **3.62 M Cum quantity**.

or

One similar completed dredging work of value costing not less than **Rs. 1090 million (excluding GST/ VAT)** or involving dredging quantity of **5.78 M. Cum quantity**.

Note:-

- I. Similar completed dredging works means successfully completed dredging and capability of offshore disposal of dredged soil using suitable dredging equipment.
- II. The value of similar works completed by the Tenderer will be brought to current cost level by enhancing the actual value of work with the multiplication factor with reference to escalation based on WPI as detailed below for assessing the eligibility of the Tenderer under experience. The base year shall be taken as 2022-23.

Year	Multiplication factor
FY 2022-23	1.00
FY 2021-22	1.09
FY 2020-21	1.24
FY 2019-20	1.25
FY 2018-19	1.27
FY 2017-18	1.33
FY 2016-17	1.37

- III. If the bidder executed the work in private organization, Bidder has to submit necessary TDS (Tax deduction certificate) against the executed works issued by competent authority.
 - IV. If the similar work is executed as sub-contractor, it is mandatory to upload the sub-contract permission letter obtained from the Govt./Public Sector officer in case work belongs to the Govt./Public Sector, or from the owner of the project in case work belongs to private organization. Also the completion certificate/form 3A authenticated by concern Govt./Public Sector officer or owner of the project shall be uploaded along with TDS certificate deducted for that particular work issued by the competent authority shall be submitted along with bid submission.
3. The bidder shall possess by absolute ownership / chartered the Trailing Suction Hopper Dredger (TSHD) of total capacity not less than 10000 cu. m. hopper capacity (with not exceeding two numbers out of which one TSHD should be minimum 7400 cu.m. hopper Capacity)
 4. The bidder shall possess by absolute ownership /chartered suitable equipment (such as Grab /Grab Hopper / Backhoe Dredger /CSD and their hopper barge / tug).

Joint venture	<ol style="list-style-type: none"> 1. In case of JV to qualify experience in similar works, merging of work order value executed by two or more of its member JV either as a whole or as member of JV shall not be permitted to qualify eligible works in terms of similar completed works. Only no. of work orders executed by members of JV shall be merged to evaluate experience. 2. Lead partner should have executed at least one similar work costing Rs. 545 million (excluding GST/ VAT) or involving dredging quantity of 2.89M. Cum quantity. as per Minimum Eligibility Criteria. 3. The works reckoned for the above purpose are those executed by the tenderer as prime contractor or proportionately as member of joint venture or as a sub- contractor, authorized and approved by the Employer of the work(s) against which the tenderer has claimed his experience. 4. In the case of bid submitted by JV/ Consortium, the lead partner of the JV shall meet the Minimum Eligibility Criteria of financial turnover. 5. Bid Security/EMD as required shall be furnished by Lead Member of Joint Venture
Bid Validity Period	180 days
Condition	<p>Integrity pact Agreement & Bid Security / EMD and copies / receipt of tender fees shall be submitted in electronic format through on line (by scanning) while uploading the cover I (preliminary bid) of the bid. If not, their bid will not be considered for evaluation.</p> <p>Integrity Pact Agreement need to be submitted online during Preliminary bid stage (Cover-I) duly scanned, stamped, signed and dated along with two witness name, address and signatures (to be furnished by the bidder) as per format available in tender document during preliminary bid stage (cover-I) failing which bid submitted by the bidder will be considered non-responsive.</p> <p>In case of JV, Integrity Pact agreement must be in the name of the JV with all parties of JV must provide stamp and signature along with two witness name, address and signature (to be furnished by the JV) without which their bid will be treated as non-responsive. Also, JV agreement with percentage share document must be uploaded in cover-I as well.</p>
Downloading of tender documents	Tender Documents can be downloaded from the official website of Deendayal Port Authority www.deendayalport.gov.in OR https://kpt.nprocure.com
Date and time of Pre-bid meeting	Dt. 12/01/2024 Time 11:00 Hrs.

Last date & time for online tender submission	On 29/01/2024 Upto 16:00 Hours on Website https://kpt.nprocure.com
Online opening of technical bid	On 29/01/2024 at 16:30 Hours
Documents required to be submitted by scanning through online	<ul style="list-style-type: none"> a. Documents in support of fulfilling qualifying criteria as indicated above b. Bid Security / EMD in form of Bank Guarantee c. Tender Fee in form of RTGS / NEFT or any electronic mode. d. Integrity Pact Agreement need to be submitted online during Preliminary bid stage (cover-I) duly scanned, stamped, signed and dated (in case of JV, JV name must be provided along with JV agreement with percentage share of all parties) along with two witness name, address and signatures (to be furnished by the bidder) as per format available in tender document during preliminary bid stage (cover-I) failing which bid submitted by the bidder will be considered non-responsive. As indicated in clause 1.6, 1.15 of Section -1 & 2.4 of Section-2, Instructions to bidders. e. As per Section-3, Clause no. 3.30 – Security Clearance, bidders are requested to upload scanned copies in technical bid as well as provide 12 nos. of hard copies of complete set of documents duly signed and stamped for security clearance failing which the bid will be treated as non-responsive.
Officer- Inviting Bids:	Dy. CHIEF ENGINEER (H&D), DEENDAYAL PORT AUTHORITY
Address:	Dy. CHIEF ENGINEER (H&D), DEENDAYAL PORT AUTHORITY, Room No. 111 Ground Floor, A.O. Building, Gandhidham-370201, Kutch District, Gujarat State, INDIA
Contact Details :	Mobile: 94272 51059

DPA Bank details for B.G:

1. Beneficiary Name: Board of Deendayal Port Authority.

Administrative office, Gandhidham -370201

2. Account No: 10080100022427

3. Name of Bank & Address: Bank of Baroda, Gandhidham Branch

4. IFSC Code: BARB0GANKUT

Note: In case bidders need any clarifications or if training is required to participate in online tenders, they can contact(n)Procure Support team at following address: -

(n)code Solutions - A division of GNFC Ltd., (n)Procure Cell, 403, GNFC Info tower, S.G. Road, Bodakdev, Ahmedabad – 380054 (Gujarat).

Contact Details:

Airtel: +91-79-40007501, 40007512, 40007516, 40007517, 40007525 BSNL: +91-79-2684511,

26854512, 26854513 (EXT: 501, 512, 516, 517, 525)

Reliance: +91-79-30181689 Fax: +91-79-26857321,40007533

E-mail: nprocure@gnvfc.net

TOLL FREE NUMBER: 1-800-233-1010 (EXT: 501, 512, 516, 517, 525)

For further details, amendments or extension of time, if any, please visit

<https://kpt.nprocure.com> OR www.deendayalport.gov.in

Dy. CHIEF ENGINEER (H&D)

DEENDAYAL PORT AUTHORITY

1 BRIEF DESCRIPTION OF THE PROJECT

On behalf of Chairperson, Deendayal Port Authority, the Dy. Chief Engineer (H&D), Gandhidham, Kachchh invites ON-LINE tenders from reputed firms with proven ability for carrying out the "DREDGING IN THE NAVIGATIONAL CHANNEL, KANDLA CREEK & ALONGSIDE CARGO BERTHS/ OIL JETTIES AT DEENDAYAL PORT AUTHORITY FOR THE YEAR 2024-27".

1.1.1 It is proposed for maintenance dredging in the navigational channel, Kandla Creek upto a minimum depth of 10m BCD, alongside cargo berths/ oil jetties upto the design levels as per BOQ including capital dredging in the proposed OJ 9 berth pocket and maneuvering area by deploying suitable dredgers as per the tender conditions (Trailer suction hopper dredger (TSHD) / cutter suction dredger (CSD) / Backhoe dredger (BHD) / Grab dredger).

Scheduled period of completion of the dredging project shall be 3 years (36 months) as per BOQ & Tender conditions.

- a) Dredging for deepening and maintenance of the navigational channel, Kandla Creek and alongside cargo berths/ oil jetties and capital dredging in the proposed OJ 9 berth pocket and approach channel of Deendayal Port with an estimated cost of **Rs. 4087.39 million** for a period of 3 years.
- b) The bidder shall possess by absolute ownership / chartered the Trailing Suction Hopper Dredger(s) of total capacity not less than 10000 cu. m. (not exceeding two numbers) for deployment in dredging area of Navigation channel and Kandla creek and same shall be used for dredging work. The assessment of the capacity of the dredger is the responsibility of the bidder based on scope of work. The trailer suction hopper dredger minimum two nos. shall be deployed out of which one should be minimum 7400 cu. m. hopper capacity. Deployment of other equipment, capacity will be assessed / judged by the bidder as per the site conditions and scope of work for capital and maintenance dredging. In case if any additional dredgers / capacity is required to deepen the channel / maintain the assured depths in the navigational channel, same shall be deployed at no such extra cost to be quoted in the bid price.
- c) The bidder shall possess by absolute ownership / chartered suitable equipment (such as CSD/Grab/Grab Hopper / Backhoe Dredger and their hopper barge / tug) for deployment in dredging areas alongside Cargo berths (for dredging & salvage) / Oil jetties, etc. of suitable capacity capable of dredging up to a depth of 20m to maintain an average working day dredging output not less than 1000 cu.m (In-situ). The above dredger and ancillary equipment such as hopper barges and tugs have to be deployed as per the availability of the berths and shall remain at site from 1st October to 30th April every year during the 3-year period of the contract. However, Contractor/Bidder has to deploy additional dredgers to achieve¹⁰ the targets of capital and maintenance dredging as per the tender, if required.

d) In case of chartering the dredgers, an "Irrevocable Letter of Authority" from the Owner of the dredger shall be produced by the bidder to the effect that the dredger so chartered shall not be withdrawn till completion of dredging work. However, the employer shall not entertain any consequential third-party claims whatsoever on account of the above LoA / Agreement between the bidder and the charterer.

e) In case the dredging firm do not own the Trailing Suction Hopper Dredger(s) and plans to execute the capital/ maintenance dredging works by other modes of arranging the dredger by wet leasing, hiring etc., the above firm has to pay additional security deposit of 5% in addition to the security deposit indicated in the tender which will be returned without interest after satisfactory completion of dredging work, in case the firm gets the contract. In addition to above, the details of arranging the dredgers for the work with "Irrevocable Letter of Authority" from the owner to be produced by the bidder to the effect that the dredger so chartered/hired shall not be withdrawn till completion of the work. The additional security deposit of 5% would not be applicable only in case of wholly owned Indian subsidiary company. However, the bidder has to submit the proof of authenticated latest document of ownership. Further, Bidder shall submit "Irrevocable letter of Authority" (in form of legal binding) from the parent / group company (owner) along with the bid to the effect that the dredger shall not be withdrawn till the satisfactory completion of the project.

f) In view of the limited width of the channel and restricted tidal window available, the Contractor is required to deploy efficient Trailing Suction Hopper Dredger(s) fitted with twin screw propulsion with bow thrusters, preferably two suction pipes & dredge pumps capable of dredging up to 20 m depth, jet pumps, dredge mixture density meter, draft load monitor with print facility, de-hoppering system and efficient dredge position control monitoring system for the dredging work in Navigational Channel and Kandla Creek.

g) The contractor can deploy a maximum of two trailer suction hopper dredgers and suitable equipment (such as CSD/ Grab /Grab Hopper / Backhoe Dredger and their hopper barge / tug) for deployment in dredging areas alongside Cargo berths (for dredging & salvage) / Oil jetties, etc. which should be as per the technical specifications/conditions as specified by the employer to meet the requirement of width and depth to be achieved/maintained during the contract period, without hampering the shipping operations. Contractor has to adjust and re-adjust the program without hampering the day to day port operation for which no claim shall be entertained.

h) The main trailer suction hopper dredger of minimum 7400 cu. m capacity (original/ equivalent substitute) shall be available throughout the contract period. In case of breakdown / dry docking / major repairs to the main dredger; substitution shall be allowed as per Clause 6.4.2. However, the Contractor has to submit proof of dry

dock / afloat repair facility booked at the time of submitting permission to sail/ replace the main dredger.

- i) The Trailing Suction Hopper Dredgers deployed at Kandla should be capable of dredging to a depth upto 20 m and should be equipped with necessary onboard equipment such as DLM showing TDS, DGPS based Track Plotter, Echo-sounder, Dredge d Material Concentration Meter, etc. to ensure effective dredging operations and the print outs of same for each load should be produced along with DDR (Daily Dredging Report). The trailer suction hopper dredgers should carry technical specifications with good propulsion power and bow thruster (s) to enable effective capital / maintenance dredging in the tidal water on the navigational channel with limited width. case the Contractor has to sail the main dredger for meeting dry docking / major repairs, the contractor has to show proof of dry dock / afloat repair facility booked at the time of submitting for permission to sail the main dredger.

1.2 Detailed Tender Notice along with complete Tender documents can be obtained from website <https://kpt.nprocure.com>, from 29/12/2023 to 29/01/2024 up to 15.00 Hrs. Tender Notice is also available on <https://www.deendayalport.gov.in> and <https://eprocure.gov.in>.

1.3 The complete tender document [including drawings] is available on Deendayal Port and IPA website [<https://www.deendayalport.gov.in/> and www.ipa.nic.in and <https://eprocure.gov.in>] and Tenderers may download the same and submit through online on website <https://kpt.nprocure.com> on or before the due date and time of submission. However, in such a case, they shall inform in writing to the DEENDAYAL PORT AUTHORITY immediately on downloading the tender documents. They shall also pay **Indian Rupees 15000/-, Plus 18% GST** towards the cost of tender on / before due date and time of submission of Tenders otherwise the tenders shall be rejected. **The bidders also have the option to upload the scanned copy of the Receipt of NEFT/RTGS or any electronic modes transaction details for the tender fee in preliminary bid /Cover-I as part of the bid submission and the hard copy of receipt shall be submitted along with physical submission in Cover-I.** Tender Fees is to be paid through digital mode of payment. The Bank details are as under.

DEENDAYAL PORT AUTHORITY

1. Name of Bank & Address: Bank of Baroda, Gandhidham Branch
2. Account No: 10080100022427
3. IFSC Code: BARB0GANKUT

1.4 No tender will be considered which is not made in the prescribed form and which is not accompanied by a deposit of **Indian Rupees 50 Lakhs** as Earnest Money Deposit. The tender offer shall have to be submitted by the Tenderer, in sealed covers as explained in the Tender Document. 12

1.5 The offer (both Techno-Commercial & Price) must be valid for a minimum of 180 days from the last date of submission of offer, otherwise the offer shall be

rejected as non-responsive.

1.6 Minimum eligibility criteria for evaluation of technical bid.

The bidder has to meet the following eligibility criteria:

1.6.1 The bidder should have adequate experience in similar type of dredging work successfully undertaken during last seven years ending last day of month previous to the one in which applications are invited should meet the following criteria:

(1) The average annual turnover during the last three years ending previous financial year shall be at least i.e. **Indian Rupees 408.80 million** (i.e. financial year 2020-21, 2021-22, 2022-23). **CA certified document for financial turnover details to be uploaded failing which bid will be considered non-responsive**

(2) Similar completed works:

(i) Three similar completed works, each work costing not less Indian Rupees 545 million OR quantity not less than 2.89 million cu. m;

or

(ii) Two similar works completed, each work costing not less than Indian Rupees 681.25 million OR quantity not less than 3.62 million cu. m.

or

(iii) One Similar work completed, costing not less than Indian Rupees 1090 million OR quantity not less than 5.78 million cu. m.

Note:

- ❖ Similar dredging works means successfully completed dredging and capability of offshore disposal of dredged soil using suitable dredging equipment.
- ❖ The value of similar works completed by the Tenderer will be brought to current cost level by enhancing the actual value of work with the multiplication factor with reference to escalation based on WPI as detailed below for assessing the eligibility of the Tenderer under experience. The base year shall be taken as 2022-23.

Year	Multiplication factor
FY 2022-23	1.00
FY 2021-22	1.09
FY 2020-21	1.24
FY 2019-20	1.25
FY 2018-19	1.27
FY 2017-18	1.33
FY 2016-17	1.37

Note:

- i) Bidder should indicate actual figures of costs and amount for the works executed by them in the schedule without accounting for the above-mentioned factors. In case the financial figure and the value of completed works are in foreign currency, the above enhancement factors will not be

applied. Instead, the foreign currency will be converted into equivalent Indian Rupees (INR) at the State Bank of India BC selling rate prevailing 28days prior to bid due date.

- ii) The Financial year of completion for the similar completed works shall be taken into account while applying multiplication factors for arriving current cost level.
 - ❖ In both the above cases (i & ii) if bidder executed the work in private organization, bidder has to submit TDS (Tax Deduction Certificate) against the executed work.
 - ❖ Bidder has to submit the work order and completion certificate from the employertowards the work experience (either in original or notarized).
 - ❖ If the similar work is executed as sub-contractor, it is mandatory to upload the sub-contract permission letter obtained from the Govt./Public Sector officer in case work belongs to the Govt./Public Sector, or from the owner of the project in case work belongs to private organization. Also the completion certificate/form 3A authenticated by concern Govt./Public Sector officer or owner of the project shall be uploaded along with TDS certificate deducted for that particular work issued by the competent authority shall be submitted along with bid submission.
- 3) The bidder shall possess by absolute ownership / chartered the Trailing Suction Hopper Dredger (TSHD) of total capacity not less than 10000 cu. m. hopper capacity (with not exceeding two numbers out of which one TSHD should be minimum 7400 cu.m. hopper Capacity)
 - 4) The bidder shall possess by absolute ownership /chartered suitable equipment (such as CSD/ Grab /Grab Hopper / Backhoe Dredger and their hopper barge / tug).

1.6.2 Note for Dredgers and other Equipment:

- (i) The bidder shall either own dredgers of suitable type and other equipment's capable of executing the dredging work within the time schedule or the firm should have entered into an agreement with any firm owning such equipmentand willing to place them at the disposal of the bidder for the entire period of contract, if they secure the contract. The bidders should substantiate their claims through proper documentary evidence such as an irrevocable agreement, ownership details, etc.
- (ii) Bidder has to submit Certificate of Registry / Certificate of Class issued by Govt. approved Authority / IACS towards dredging equipment and valid insurance for verification of equipment.
- (iii) In case of chartered equipment, an "Irrevocable letter of authority" from the owner of the equipment shall be produced by the bidder to the effect that the equipment so chartered shall not be withdrawn till completion of dredging contract.

1.7 Bidders has to submit the work order and completion certificate from the

employer towards the work experience (either in original or notarized). Bidder also has to submit Certificates of Registry / Certificate of Class issued by Govt. approved Authority / IACS towards dredging equipment and valid insurance for verification of equipment.

- 1.8 With regard to participation of Indian tenderer(s), the Indian firm /companies owning Indian flag dredgers including Dredging Corporation of India Ltd. shall have right of first refusal before the contract is given to any foreign company only if the bid of the Indian company is within 20% of the lowest technically qualified and they shall have to undertake the work by entering into a contract with DPA exactly similar to the contract which would have been entered into with the lowest tenderer i.e. the contract shall be on a commercial format. If more than one Indian company/ firms owning Indian Flag Dredgers including Dredging Corporation of India Ltd. participate in the tender, the right of first refusal will go to that Indian company which has quoted the lowest and is within 20% of the lowest technically qualified offer subject to obtaining security clearance. If an Indian flag vessel is not available, then "Indian controlled ships" shall be accorded higher priority in the Right of First refusal than Non-Indian Flag Vessels. (Note: DGS Circular no. 2 of 2021 dated 14.01.2021 shall be applicable for exercise of right of first refusal-grant of license to foreign flag vessel. In this regard, guideline issued by DG Shipping shall be applicable from time to time.)

If Bidder, an Indian subsidiary / company of a foreign company is qualifying for bidding based on the qualifications of its Parent Firm, the bidder will not be eligible for the right of first refusal under this clause even if all the dredgers belong to the bidder are Indian Flag / Indian Controlled ships.

In case the lowest tender is from an Indian company, the contract will be awarded to the Indian company without first right of refusal to Dredging Corporation of India Ltd. even if it is within 10% of the lowest technically qualified.

Indian Tenderer means Indian Citizen/ Indian domestic Company /Society either having Indian flag vessel(s) or proposing in the tender for converting foreign flag vessels to Indian flag vessels before commencing the work. An Indian dredging company shall be a company registered under the companies Act 1956 engaged in dredging work and having dredgers under Indian flag or vessels registered as Indian controlled tonnage ships in accordance with DGS order No.10 of 2014.

In case the contract is awarded to an Indian tenderer through the process of exercising the first right of refusal and the work is executed by such tenderer by deploying foreign flag vessel, it shall call for penalty of Indian Rupees

1,500,000/-per day for the first 10 days and Indian Rupees 2,000,000/- per day for the next twenty days, to the employer. In case the deployment of foreign flag dredger extends for more than 30 days during the period of the contract, the Employer reserves the right to call for termination of the contract.

The Employer and/ or Government of India through Ministry of Ports Shipping and Waterways reserves the right to assign, in public interest, any contract for dredging work in any of the major ports to Dredging Corporation of India Ltd. on nomination.

- 1.9 The Employer/ Board do not bind themselves to accept the lowest or any tender and reserve the right to accept any tender in part or to reject any tender without assigning any reason thereof.
- 1.10 Pre-bid meeting will be held with the representative of the firms, bidders or his official's representative are invited to attend the pre-bid meeting. The prospective Tenderers shall submit their queries in writing to The Dy Chief Engineer (H&D), Deendayal Port Authority (Email: dredgingdpt@gmail.com) in connection with this tender well in advance latest by 03 days prior to pre bid meeting date, so that the queries can be attended to. The pre-bid meeting will be held on 12/01/2024 at 11:00 hrs. in the Old Board Room at Deendayal Port Authority Admin. Office Bldg., Gandhidham.
- 1.11 The due date of submission of offers will be 29/01/2024 unless notified otherwise. In the event of changes in the schedules, the Deendayal Port will notify the same through its web site.
- 1.12 If the offers are not received according to the instructions detailed here above, they shall be liable for rejection. The corrections and remarks shall be either type-written or must be in ink and duly authenticated.
- 1.13 The Contractor should mobilize suitable dredger(s) capable of executing the dredging work within the time schedule. The documentary evidence about the capability, experience in the relevant field and financial status to be furnished along with the offer are: -
 - (i) Details of dredging work executed in last 7 years with names and address of clients, type of dredging work executed, details of dredgers deployed, quantity, scheduled period of execution, date of commencement and date of completion and certificate/testimonials from the concerned clients regarding successful completion of the job.
 - (ii) Details of dredger(s) and other supporting crafts and facilities including discharge pipeline etc. available and proposed dredgers and their mobilization time to this site.
 - (iii) Capability of the firm in carrying out pre and post dredging bathymetric surveys.

- (iv) Name and curriculum vitae of dredging team and surveyors proposed to be deployed.
- (v) Registration details of the firm, bankers, company profile, and financial position of the firm during the last five years.

The complete tender document [including drawings] is available on Deendayal Port and IPA website [<https://www.deendayalport.gov.in/> and www.ipa.nic.in and <https://eprocure.gov.in>] and Tenderers may download the same and submit through online on website <https://kpt.nprocure.com> on or before the due date and time of submission. However, in such a case, they shall inform in writing to the DEENDAYAL PORT AUTHORITY immediately on downloading the tender documents. They shall also pay **Indian Rupees 15000/-, Plus 18% GST** towards the cost of tender on / before due date and time of submission of Tenders otherwise the tenders shall be rejected. **The bidders also have the option to upload the scanned copy of the Receipt of NEFT/RTGS or any electronic modes transaction details for the tender fee in preliminary bid /Cover-I as part of the bid submission and the hard copy of receipt shall be submitted along with physical submission in Cover-I.** Tender Fees is to be paid through digital mode of payment.

The Bank details are as under.

DEENDAYAL PORT AUTHORITY

1. Name of Bank & Address: Bank of Baroda, Gandhidham Branch

2. Account No: 10080100022427

3. IFSC Code: BARB0GANKUT

- a. No tender will be considered which is not made in the prescribed form and which is not accompanied by a deposit of Indian rupees Rs. 50 Lakhs as Earnest Money Deposit(EMD)/ Bid security. The tender offer shall have to be submitted by the Tenderer, in sealed covers as explained in the Tender Document.
- b. The offer (both Techno-Commercial & Price) must be valid for a minimum of **180 days** from the last date of submission of offer, otherwise the offer shall be rejected as non-responsive.

1.14 Bidders who wish to participate will have to procure/ should have legally valid Digital Certificate, as per Information Technology Act-2000, using which they can sign their electronic bids. The bidders can procure the Digital Certificate from (n) code solutions a division of GNFC Ltd, who are licensed certifying authority by Government of India. All bids should be digitally signed. For details regarding Digital signature certificate and related matters, the below mentioned

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address should be contacted: (n) code Solutions, A Division of GNFC, 304 GNFC Info tower, Bodakdev, Ahmedabad. Tel. 91 79 26857316/17/18 Fax: 91

79 26857321 E-mail: nprocure@ncode.in Toll Free Number: +91 7359 021 663
/ 1800-419-4632, Mobile: 9327084190 / 9898589652.

- 1.15 However, the originals/ attested hard copies shall have to be forwarded subsequently so as to reach the office of Dy. Chief Engineer (H&D) within 07 days of opening of the tenders.

However, Tenderers should submit following in hard copies within 07 days from last date of online submission of bid:

Cover-I, Cover-II and Cover-III are super scribed as under:

Cover-I: The Tender Fee, duly signed and sealed integrity pact agreement & Bid Security as indicated in NIT.

Cover-II: The Technical Bid and the tender duly filled and signed

Cover-III: The un-priced Bill of Quantities duly signed.

All the covers shall be wax sealed. The three covers marked Original shall then be placed in an envelope and marked ORIGINAL and sealed as stated above. All the sets shall then be placed in an outer envelope.

Cover I of the tender shall contain the following:

Integrity pact agreement, Bid Security / EMD and Tender Fee in the prescribed form as indicated in NIT.

Cover II of the tender shall consist of but not limited to the following:

- a) Duly executed Power of Attorney in favour of person or persons authorized to sign the tender.
- b) The tender document duly filled and signed.
- c) Copies of documents defining constitution and legal status.
- d) Document regarding structure of the tender as indicated in these Instructions.
- e) Balance sheets along with turnover, Income Tax clearance certificates, profit and loss account for the previous three financial years ending 31st March 2023.
- f) Tenderer shall submit detailed methodology backed up by specification and calculations.
- g) Details of Contractor's Equipment including but not limited to number, make, date of manufacture/acquisition, capacity, and in case of Vessel/ship instruments, gadgets etc. with which such vessel/ship are equipped or fitted for the proposed Works.
- h) Schedule of Contractor's Equipment to be used.
- i) Works Plan and Dredging Schedule.
- j) Details of pending work, if any, or likely commitments, if any, and/or Experience in works of similar nature executed in the last 7

years.

In case of Joint Venture, such details are to be given for each partner of the Joint Venture.

- k) All the tenderers are required to submit an unconditional tender without any deviations failing which their offer will be treated as incomplete and same will be rejected and the price bid will not be opened.
- l) List of sub-contractors.
- m) An undertaking that Cover III does not contain any conditions.
- n) Work Schedule
- o) Schedules (as per format)
- p) Original Tender Documents
- q) Copies of fax messages and letters sent and received during the tender period.
- r) Details if any of the tenderer being delisted / debarred by any of their previous Employer, which is valid at the time of submission of the bids, the reason for the same shall be evaluated by the Employer considering the nature and requirement of the present contract. The Employer reserves the right to reject such proposal, if found necessary. The Employer's decision in this regard shall be final and binding on the bidder.
- s) All other documents set out in the Tender Document which the Tenderer is specifically required to submit along with the Tender.

Cover III of the tender shall contain the un-priced Bill of Materials duly signed.

Tender not accompanied by required EMD shall be liable for rejection. Previous dues / deposits with Port Authority shall not be counted / adjusted towards earnest money deposit.

The bidder has to submit all the required and essential documents for pre-qualification through online procedure. However, the hard copies of all documents are required to be submitted as per tender provisions.

Late bids, delayed bids received after the stipulated last date and time for receipt of bids, due to any reasons will not be considered. DEENDAYAL PORT AUTHORITY reserves the right to reject any or all the tenders without assigning any reason thereof.

Note: In case bidders need any clarification or its training is required to participate in online tenders, they can directly contact (n) Procure Support team at following address:

(n) code Solution - A division of GNFC Ltd.,
(n) Procure Cell, 304, GNFC Info tower, S. G. Road,
Bodakdev, Ahmedabad - 380054 (Gujarat)

Contact Details:

Mobile: +91 9327084190 / +91 9898589652

Airtel: +91-79-40007501, 40007512, 40007516, 40007517, 40007525

BSNL: +91-79-2684511, 26854512, 26854513 (EXT: 501, 512, 516, 517,
525) Reliance: +91-79-26857316/17/18 40007533 Fax: +91-79-40007533
E-mail: nprocure@ncode.in
TOLL FREE NUMBER: +91 7359 021 663 / 1800-419-4632

**Dy. CHIEF ENGINEER (H&D)
DEENDAYAL PORT AUTHORITY**

Section 2

INSTRUCTIONS TO BIDDERS

SECTION - 2

INSTRUCTIONS TO BIDDERS

2.0 INTRODUCTION

Broad Scope of Work

The Scope of work under the Contract is as more particularly specified in the Specifications for dredging work (Section-5 and 6) of the Tender Document. However Scope of Work is not exhaustive and the Tenderers while quoting are expected to take into account all ancillary and necessary work that may be required to be done or performed by them for achieving and maintaining the required depth & width in the navigation channel, Kandla Creek, and at alongside of cargo berths 1 to 16, oil jetties 1 to 8, Maintenance jetty, zero panel, flotilla jetty, SNA jetty, Bunder Basin, proposed OJ9 and disposal of the dredged material at the designated area, submitting charts and/or making the facility fully operational, whether or not explicitly stated in the Specification or elsewhere in the Tender Document and all such ancillary and necessary work shall be, deemed to be included and forming part of this Contract.

The Scope of the work inter-alia involves dredging in the existing Port area for maintenance of the navigation channel Zone IA, Zone I, Zone II & Zone IB and Kandla Creek up to Oil Jetty No. 8, alongside of cargo berths 1 to 16, oil jetties 1 to 8, maintenance jetty, zero panel, flotilla jetty, SNA jetty, Bunder Basin, proposed OJ 9 and Navigational Channel & Kandla Creek to the extent found necessary to achieve defined width and depth and disposal of the dredged material at the designated area and submitting charts/dredging plan as indicated in this tender document i.e. Specification for dredging work. The estimated cost of this work is **INR 4087.39 million**.

2.1 TENDER REQUIREMENTS

2.1.0 General

2.1.1 The Bid Document **downloaded by** the Bidder is non-transferable.

2.1.2 Bid Documents shall remain the property of the EMPLOYER.

2.1.3 EMPLOYER will not be responsible for any costs or expenses incurred by the bidder in connection with the preparation and delivery of his bid or for any other expenses incurred in connection with such bidding.

2.1.4 The work to be done is described in the Bid document (and in particular in the technical specifications, Bill of Quantity and drawings) and in general includes, but is not limited to supplying all dredgers, crafts, all materials including consumables, and equipment necessary to conduct surveys, dredging and disposal of spoil at specific field dumping ground as described in the Bid Document.

Quantities, drawings and specifications given in the Bid Document are for the sole purpose of indicating to bidders the order of magnitude of work and are not in anyway guaranteed to remain unchanged. Time is the essence of contract and the work shall be completed in all respects during a period of 36 months from the date of commencement of the work.

2.1.5 Bidders are advised to visit the site of the work, review the drawings, and acquaint themselves of all site conditions prior to submission of their bid. Failure to visit the site will in no way relieve the successful bidder of any of the obligations in performing the work in accordance with this Bid Document within the quoted price.

DPA is contemplating execution of a project relating to re-use /gainful utilization of dredged materials to ensure viable dredging project and least environmental degradation. Bidders are therefore, required to look into the aspect and submit proposal with cost benefit analysis for gainful utilization of dredged materials. However, this proposal / financial analysis will have no repercussion on pre-qualification & financial evaluation.

It is proposed to hold a pre-bid discussion with all the bidders in the Board room of Deendayal Port Authority on **12/01/2024 at 11:00 Hrs**

The bidders who need clarifications on any specific issue shall inform the EMPLOYER in writing latest by 3 days prior to pre bid meeting at the address given in the next clause. No queries /clarifications shall be entertained after the above date and during pre-bid meeting.

2.1.6 If the bidders find discrepancies in or omission from the drawings, specifications, or other documents, or have any doubts as to the meaning or intent of any part thereof, they shall at once inform the EMPLOYER who may send a written instruction or explanation to all bidders. No oral interpretations shall be made by any bidder as to the meaning of any of the provisions of the bid documents. Every request for an interpretation shall be in writing addressed and forwarded to the EMPLOYER at the following address:

**Office of The DY. CHIEF ENGINEER (H&D)
DEENDAYAL PORT AUTHORITY
Room No.111, New Annexe Building
A.O. Building
Gandhidham – 370
201 Kachchh-
Gujarat.**

2.1.7 In formulating their bid, bidders shall have full regard to the contents of the Bid Documents since all bids will be deemed to have been made after taking into account all the provisions thereof. The agreement as finally executed²⁹ will include the Employer's Bid Documents and the Bidder's offer as finally accepted by the EMPLOYER together with Addenda, bid clarification and all correspondences

exchanged between Deendayal Port Authority and the bidder, if any.

2.1.8 Submission of fraudulent documents shall be treated as a major violation of the tender procedure and in such cases, Deendayal Port shall resort to forfeiture of Bid Security of the bidder, apart from blacklisting the firm for the next 3 years.

2.1.9 The bidders may please note that the EMPLOYER will not entertain any correspondence or queries on the status of the offers received against this Bid. Bidders are also requested not to depute any of their personnel or Agents to visit the Employer's offices for making such enquiries till finalization of the bid.

Should the EMPLOYER find it necessary to seek any clarifications, technical or otherwise the concerned bidder will be duly contacted by the EMPLOYER.

2.1.10 Canvassing in any form by the bidder or by any other agency acting on behalf of the bidder after submission of the bid may disqualify the said bidder. The Employer's decision in this regard shall be final and binding on the bidder.

2.1.11 The EMPLOYER may reject, accept or prefer any bid without assigning any reason whatsoever. The EMPLOYER also reserves to himself the right to accept any bid in part or parts only with such conditions as he may prescribe.

2.1.12 The successful bidder shall furnish the required Performance Security in the form of Bank Guarantee from a Nationalized/Scheduled Bank (except Co-Operative Bank) having branch at Gandhidham-Kachchh to the EMPLOYER in the Performa enclosed at **Annexure-5** for the amount indicated in the Appendix to tender.

2.1.13 EMPLOYER will not be liable for any financial obligation in connection with the work until such time the EMPLOYER has communicated to the successful bidder in writing his decision to Authority the Work (covered by the bid document issued to him).

2.1.14 In case of an unscheduled holiday on the prescribed closing/opening day of the bid, the next working day will be treated as the scheduled prescribed day of closing/opening of the bid.

2.1.15 Bidders to note that the bids shall first be evaluated for **minimum eligibility criteria** given in the **tender**. Bidders not meeting the eligibility criteria do not qualify to proceed further.

2.2 INSTRUCTIONS FOR FILLING BIDS.

2.2.1 The bids can only be **submitted in the name of the bidder in whose name the bid documents were downloaded by the bidder.**

2.2.2 **The bid and any annotations or accompanying documentation shall be in English language only and in metric system.**

2.2.3 Bidders shall sign their proposal with the exact name of the firm. The bid shall be duly signed and sealed by an authorized executive officer of the bidder's

organization in all the pages.

2.2.4 Each bid shall be signed by a duly authorized officer and in the case of a Corporation shall be sealed with the Corporate Seal or otherwise appropriately executed under Seal.

2.2.5 Bidders shall clearly indicate their legal constitution and the person signing the tender shall state his capacity and also the source of his ability to bind the bidder. The power of attorney or authorization or any other document constituting adequate proof of the ability of the signatory to bind the bidder shall be annexed to the bid. The

EMPLOYER may reject outright any bid unsupported by adequate proof of the signatory's authority.

Integrity Pact Agreement need to be submitted online during Preliminary bid stage (Cover-I) duly scanned, stamped, signed and dated along with two witness name, address and signatures (to be furnished by the bidder) as per format available in tender document during preliminary bid stage (cover-I) failing which bid submitted by the bidder will be considered non-responsive.

2.2.6 Submission of bids

Bidders who wish to participate will have to procure/ should have legally valid Digital Certificate, as per Information Technology Act-2000, using which they can sign their electronic bids. The bidders can procure the Digital Certificate from (n) code solutions a division of GNFC Ltd, who are licensed certifying authority by Government of India. All bids should be digitally signed. For details regarding Digital signature certificate and related matters, the below mentioned address should be contacted: (n) code Solutions, A Division of GNFC, 304 GNFC Info tower, Bodakdev, Ahmedabad. Tel.91 79 26857316/17/18 Fax: 91 79 26857321 E-mail: nprocure@ncode.in Toll Free Number: +91 7359 021 663 / 1800-419-4632, Mobile: 9327084190 / 9898589652.

The accompaniments to the tender documents as described under Clause 2.2.7.1, 2.2.7.2 and 2.2.7.3 shall be Scanned and submitted On-Line along with Tender documents. However, the originals/ attested hard copies shall have to be forwarded subsequently so as to reach the office of Dy. Chief Engineer (H&D) within 07 days of opening of the tenders.

The envelopes shall be addressed to:

a) Office of The Dy.Chief Engineer (H&D),
Deendayal Port Authority, Room No-111,
Ground Floor, A.O.Building, Gandhidham -
Kutch-370201. Gujarat- State.

b) Bear the following identification:

Accompaniments for "DREDGING IN THE NAVIGATIONAL CHANNEL, KANDLA CREEK & ALONGSIDE CARGO BERTHS/ OIL JETTIES AT DEENDAYAL PORT AUTHORITY FOR THE YEAR 2024-27".

Bid reference **No. H&D: 03/2023**

Name and address of the bidder.

2.2.6.1 Deadline of Submission of the Bids

Bids must be received by the Employer in On-line System at website <https://kpt.nprocure.com> not later than **16:00 hrs. on 29/01/2024** in the event of the specified date for the submission of bids being declared a holiday by the Employer, the Bids will be received up to the appointed time on the next working day.

The Employer may extend the deadline for submission of bids by issuing an amendment in which case all rights and obligations of the Employer and the bidders previously subject to the original deadline will then be subject to the new deadline.

At the time of submission of the tender document, the tenderer shall give an undertaking that no changes have been made in document. The uploaded version of the Port Tender Document will be treated as authentic tender and if any discrepancy is noticed at any stage between the Port's tender document and the one submitted by the tenderer, the conditions mentioned in the Port's uploaded document shall prevail. Besides, the tenderer shall be liable for legal action for the lapses.

2.2.6.2 Late Bids

After the deadline prescribed in Clause 2.2.6.1 the bids cannot be submitted in the On- Line System.

2.2.6.3 Modification and Withdrawal of Bids

Bidders may modify or withdraw their bids before the deadline on the website as prescribed in Clause 2.2.6.1.

No Bid can be modified after the deadline for submission of Bids.

2.2.7 Cover-I, Cover-II and Cover-III and super scribed as under

2.2.7.1 Cover I of the tender shall contain the following:

The duly filled and signed Integrity pact, Bid Security / EMD and Tender Fee in the prescribed form as indicated in NIT.

2.2.7.2 Cover II of the tender shall consist of but not limited to the following:

- a) Duly executed Power of Attorney in favour of person or persons authorized to sign the tender.
- b) The tender document duly filled and signed.
- c) Copies of documents defining constitution and legal status.
- d) Document regarding structure of the tender as indicated in these Instructions.
- e) Balance sheets along with turnover, Income Tax clearance certificates, profit and loss account for the previous three financial years ending 31st March 2023.
- f) Tenderer shall submit detailed methodology backed up by specification and calculations.

- g) Details of Contractor's Equipment including but not limited to Number, make, date of manufacture/acquisition, capacity, and in case of Vessel/ship instruments, gadgetsetc. with which such vessel/ship are equipped or fitted for proposed for the Works.
 - h) Schedule of Contractor's Equipment to be used
 - i) Works Plan and Dredging Schedule.
 - Details of pending work, if any, or likely commitments, if any, and/or
 - Experience in works of similar nature executed in the last 7 years. In case of Joint Venture, such details are to be given for each partner of the Joint Venture.
 - j) All the tenderers are required to submit an unconditional tender without any deviations failing which their offer will be treated as incomplete and same will be rejected and the price bid will not be opened.
 - k) List of sub-contractors.
 - l) An undertaking that Cover III does not contain any conditions.
 - m) Work Schedule
 - n) Schedules (as per format)
 - o) Original Tender Documents
 - p) Copies of fax messages and letters sent and received during the tender period.
 - q) Details if any of the tenderer being delisted / debarred by any of their previous employer along with the reasons for the same.
- (Note: For any bidder delisted/ debarred by any of their previous Employer, which is valid at the time of submission of the bids, the reason for the same shall be evaluated by the Employer considering the nature and requirement of the present contract. The Employer reserves the right to reject such proposal, if found necessary. The Employer's decision in this regard shall be final and binding on the bidder.)
- r) All other documents set out in the Tender Document which the Tenderer is specifically required to submit along with the Tender.

2.2.7.3 Cover III of the tender shall contain the following:

The price bid shall contain only un-priced in the given format duly signed and no condition whatsoever including indicative rates/ prices. Any condition given in the price bid shall be sufficient cause for rejection of bid.

2.2.7.4 All inner envelopes shall indicate the name and address of the tenderer to enable the tender to be returned unopened in case it is received late or if the Tender Fee & Bid-Security is not enclosed.

2.2.7.5 All the recipients of tender shall treat the Tender documents as private and Confidential.

2.2.8 If the space in the bid form or in the Appendices there to is insufficient, additional pages shall be separately added. These pages shall be consecutively page numbered and shall also be duly signed by the Bidder.

2.2.9 The bid documents shall be signed by the bidder on each page. 27

2.2.10 Bidders should indicate at the time of quoting against this bid their full postal and Telegraphic/telex addresses.

2.2.11 Bidders shall submit along with their offer EMD of the amount mentioned in the Tender Call Notice.

EMD of Indian Rupees Rs. 50 Lakhs may be payable in the form of Bank guarantee for the entire amount from any Nationalized/Scheduled Bank (Except Co-operative Bank) having its branch at Gandhidham (Kachchh), Gujarat, India. The EMD shall be valid for 28 days beyond the validity of the bid. The EMD of the unsuccessful bidder other than L1 and L2 shall be refunded immediately after ranking of price bids. EMD of L2 shall be refunded immediately after entering into agreement with L1 and acceptance of performance guarantee.

2.2.12 In case of tender document being downloaded from the website, at the time of submission of (the hard copy of) the tender document, the tenderer shall give an undertaking that no changes have been made in the document; He shall be issued a printed set of the document under acknowledgement with a condition that the printed version of the Port Tender document will be treated as authentic tender and if any discrepancy is noticed at any stage between the Port's tender document and the one submitted by the tenderer, the conditions mentioned in the port's printed document shall prevail. Besides, the tenderer shall be liable for legal action for the lapses.

2.2.13 The Bank Guarantees shall be verified independently by the Port with the bank before finalization of technical offers. In the event of lack of confirmation of issue of the BG by the bank, the bid shall stand disqualified.

2.2.14 If Indian tenderer/s is/are involved, it will get the first right of refusal before the contract is given to any foreign company only if the bid of the Indian company is within 20% of the lowest offer and they shall have to undertake the work by entering into a contract with employer exactly similar to the contract which would have entered into with the lowest tenderer i.e. the contract shall be on a commercial format. If more than one Indian company including Dredging Corporation of India (DCI Ltd) participates in the tender, the right of first refusal will go to that Indian company which has quoted the lowest and is within 20% of the lowest technically qualified offer. If an Indian flag vessel is not available, then "Indian controlled ships" shall be accorded higher priority in the Right of First refusal than Non-Indian Flag Vessels. (Note: DGS Circular no. 2 of 2021 dated 14.01.2021 shall be applicable for exercise of right of first refusal-grant of license to foreign flag vessel. In this regard, guideline issued by DG Shipping shall be applicable from time to time.)

(ii) An Indian tenderer which is qualified by relying on the credentials of a foreign company will not be eligible for claiming the first right of refusal.

(iii) In case the lowest tender is from an Indian company, the contract will be awarded to the Indian company without first right of refusal to DCI even if it is within 20%.

(iv) Indian Tenderer means Indian Citizen/ Indian domestic Company/Society

either having Indian flag vessel(s) or proposing in the tender for converting foreign flag vessels to Indian flag vessels before commencing the work. An Indian dredging company shall be a company registered under the companies Act 1956 engaged in dredging work and having dredgers under Indian flag or vessels registered as Indian controlled tonnage ships in accordance with DGS order No.10 of 2014.

(v) In case the contract is awarded to an Indian tenderer through the process of exercising the right of first refusal and the work is executed by such tenderer by deploying foreign flag vessel, it shall call for penalty of Indian Rupees 1,500,000/- per day for the first ten days and Indian Rupees 2,000,000/- per day for the next twenty days, to the employer. In case the deployment of foreign flag dredger extends for more than thirty days during the period of the contract, the Employer reserves the right to call for termination of the contract.

(vi) The Government of India through Ministry of Shipping reserves the right to assign, in public interest, any contract for dredging work in any of the major ports to Dredging Corporation of India on nomination basis.

(vii) While evaluating tenders regard would be paid to national defense and security considerations.

(viii) The (i) to (vii) above are made as per various guidelines issued by the Ministry of Shipping (DG Shipping and also Ports Wing) regarding chartering of foreign flag vessels and security clearance of the tenderers. Any further guidelines issued by the Ministry till the due date of tender shall also be applicable for this contract.

(ix) Guidelines issued by DG (Shipping), Mumbai from time to time in terms of the relevant provisions of Merchant Shipping, shall be applicable.

(x) At any time during the execution of the dredging work as per this tender, if any directive is issued by the Government of India through Ministry of Shipping to make

alternative arrangement for meeting the dredging; the employer will issue a 30 days' notice and rescind the agreement for the ongoing dredging work and the contractor is obliged to make arrangements for smooth hand over of the site through a joint survey. The contractor has to hand over the site and demobilize his entire equipment at the end of the notice period. The payment arising due to rescinding / foreclosure of agreement and termination by Employer will be in compliance with **Clause 3.14.2 (i)** of the General Conditions of the Contract at Section-3 of this tender.

2.2.15 The EMD of second lowest evaluated bidder shall be kept in reserve and may be invited to negotiate to match the lowest evaluated bid, in case the evaluated bidder withdraws his bid or not selected for any other reason.

2.2.16

Note:

If Bidder, an Indian subsidiary / Company of a foreign company is qualifying for bidding based on the qualifications of its Parent Firm, the bidder will not be eligible for the right of first refusal under this clause even if all the dredgers belong to the bidder are Indian Flag / Indian Controlled ships.

2.3 PRICING OF BID

2.3.1 General

The Bid shall be on lumpsum basis for Maintenance Dredging (Item 1, 2, & 3, 9 of Bill of Quantity) and item rate basis for other items of Bill of Quantities (Item 4, 5, 6, 7, 8 & 10, Bill of Quantity). The offer shall include planning, mobilization and demobilization of Trailing Suction Hopper Dredgers/other Dredgers/Suitable Dredging machinery/ equipment for dredging/disposal of dredged spoils/other required crafts including all items/materials, labour, tools, fabrication, transportation, insurance, taxes, duties, consumables, overhead, profit etc. necessary for execution of dredging as described in the Bid Document.

2.3.2 Currencies of Quotation

The Bidder shall indicate the prices in Indian Rupees. The Bidder shall not quote in any currency other than Indian Rupees.

2.3.3 Validity

- i. The tender shall remain valid and open for acceptance for a period of **180** days from the date of opening of Technical and Commercial bid.
- ii. Notwithstanding Clause 2.3.3 (a), prior to the expiry of the tender validity period, the Employer may, if required request the Tenderer to consent to a specified extension of the tender validity period. The request and the responses thereto shall be

made in writing or by fax. If the Tenderer agrees to the extension, then the Tenderer will be required to suitably extend the validity period through Bid Securing Declaration. A Tenderer agreeing to extend the validity will not be permitted to modify its tender. Tenderer may refuse the request without forfeiting its Tender Security / EMD.

2.3.4 Duties and Taxes

Indian Custom Duties, if any, levied upon the work, dredger, equipment etc. are to be borne by the bidders and to be incorporated in the Item-Rates and this will not be separately paid for. The Contractor shall bear all Taxes both corporate and personnel, including but not limited to taxes on income levied on the Contractor or on their affiliated companies on account of payments received by them from the EMPLOYER for the works done under the Contract.

It shall be the responsibility of the Contractor to submit to the concerned Indian Statutory Authorities the returns and all connected documents required for this purpose. The Contractor shall also provide the EMPLOYER such information as they may require in regard to the Contractor's income and expenditure for this purpose.

2.4 INFORMATION REQUIRED

2.4.1 Cover I of the tender shall contain the following:

Duly filled and signed Integrity pact, Bid Security / EMD and Tender Fee in the prescribed form as indicated in NIT.

2.4.2 COVER-II (Technical & Commercial bid) shall contain the following:

- i. A description of the facilities in sufficient detail and clarify to enable the EMPLOYER to make an evaluation and comparison of the Bid.
- ii. List of major marine equipment proposed to be deployed for this work. The Bidders shall provide complete details such as dimensions, capacity of Dredgers, other floating crafts and equipment if any etc. trade name, year of built, Registration particulars etc.
- iii. Description of Bidder's work experience in the past on projects of similar nature with the details given in Table 1 (1) enclosed as **Annexure 6** to the bid. This will include: Execution of large dredging works in the last seven years. Concurrent commitments of the bidder shall be separately given with the details indicated at Table 1 (2) enclosed as **Annexure 7** to the bid.

- iv. Bidder shall furnish a list of the supervisory personnel intends to deploy with their Biodata and proposed methodology for execution of the work i.e. design, planning, dredging with disposal of spoil, quantity surveying instruments and its accuracy and progress of the work etc. so as to ensure maintenance of dredged levels till defect liability period or taking over of the work as applicable at respective locations as stipulated in the Specification attached to this Bid Document.
- v. If necessary, the Contractor should mobilize additional resources like dredgers, equipment etc. at his own expenses for proper completion of work. Keeping the above in view and since time is the essence of contract, the Bidder shall indicate how he would execute the work within the time specified by submitting a description of equipment and work method to be employed and the limiting weather condition for the proposed equipment. The Bidder shall also include a description of all procedures or any special technique to be employed in setting up the Works.
- vi. An overall project schedule, including, deployment, using critical path method shall be furnished along with the bid. The Bidder shall indicate the project key-dates for all activities.
- vii. Unpriced copies of Schedule of Prices with details of quantities only as Specified in the Bid Document shall be enclosed with technical bids. **Any direct / indirect indication of price of any BoQ item(s) in the technical bid will make the bid liable for outright rejection.**
- viii. Letter of Authority as per Performa enclosed as **Annexure- 2** to the bid.
- ix. Detailed dredger deployment schedule indicating total dredger days planned item- wise.
- x. If the bidder wants to deviate any conditions of the contract, the same shall be incorporated under relevant annexures viz., Annexure – 3 – Exception and Deviation while submitting the bid. The Employer reserves their right to consider such deviations which, in their opinion, not involving any financial involvement/ commitment or reject all the deviations and modifications suggested by the bidder in full or in part at their sole discretion without assigning any reasons.
- xi. Without prejudice to the condition stipulated in clause no. xi in the recital, bidder may request for any clarification / information on the tender conditions which shall be replied during the pre-bid meeting and subsequently in writing. After the pre-bid clarifications are issued, no exceptions/ deviations from Bid Document specifications and conditions are permissible. It shall be noted that the **conditional bids are liable to be rejected.**

- xii. Bidder may request for any clarification / information on the tender conditions which shall be replied during the pre-bid meeting and subsequently in writing. After the pre-bid clarifications are issued, no exceptions/ deviations from Bid Document specifications and conditions are permissible. Conditional bids are liable to be rejected. Bidder shall enter 'Nil' in the Exceptions and Deviations, Annexure-3" while submitting the bid.
- xiii. EMD as stipulated in the Tender Call Notice.
- xiv. Any other information required in terms of this Bid Documents.
- xv. List of instruments for survey and monitoring the work and list of other equipment for actual measurement of the dredged spoil with the details indicated in Table-1(3) enclosed at Annexure-8 to the bid.
- xvi. Balance sheets along with turnover, Income Tax clearance certificates, profit and loss account for the previous three financial years ending 31st March 2023. Memorandum of Articles and Articles of Association. In case of foreign firms, the statement be given to the fact that they have no claims pending against them from any State Authority in India with respect to Income tax, Goods and Service Tax in any form or any other dues. Any import duty in respect of equipment's, dredgers etc. shall be borne by the firm. Income tax, GST in any form, etc. leviable for foreign contractor and the foreign employees shall be borne by the firm. SGST if applicable shall be charged.

2.4.3 COVER-III - The Priced Part of the Offer

The price bid shall contain only un-prices in the format given and no condition whatsoever including indicative rates/ prices. Any condition given in the price bid shall be sufficient cause for rejection of bid.

The price bid for the work in Bill of Quantity (BoQ) format should be submitted through the e-procurement portal only and such price bids shall be opened as per Clause 2.6.2 below.

2.5 EVALUATIONS AND COMPARISON OF BIDS

2.5.1 General

2.5.1.1 After the receipt of bids, if required, the EMPLOYER may inspect the facilities available with the bidder to ensure suitability and satisfactory working conditions of the dredgers and of the equipment listed to be used by the bidder for the work. The bidder shall ensure that aforesaid team shall at all the times have access to visit and inspect dredgers, equipment etc. EMPLOYER reserves the right to accept price part of the offer (COVER-III) of only such bidders whose technical

and commercial aspects of the proposals (COVER-I & II) are acceptable and complete. The Employer's decision in this regard shall be final and binding on the bidder. The EMPLOYER may not open price part of the offer (Financial bid) of the bidders whose technical and commercial aspect of the proposal is not acceptable or incomplete.

2.5.1.2 EMPLOYER also reserves the right to obtain revised Commercial bid to the extent and in areas required from the technically acceptable bidders.

2.5.2 Evaluation Criteria

The Bids received and accepted will be evaluated by the EMPLOYER to ascertain the relative position of the best Bid in the interest of the EMPLOYER, for the complete Work covered up by Bid Documents.

Authenticity of the work/ experience certificate shall be ensured by the EMPLOYER before awarding of the contract to the bidder.

2.6 BID OPENING

The Technical Bids shall be opened at **16:30 Hrs. on 29/01/2024** in the Office of the Dy. Chief Engineer (H&D), DEENDAYAL PORT AUTHORITY.

2.6.1 At the time of Bid opening the EMPLOYER will permit only authorized representative of each Bidder to be present provided such representative presents to the EMPLOYER at that time, a letter duly signed by the Bidder authorizing him to be present on behalf of the Bidder.

2.6.2 Price Bids Part of the Offer

Price Bids of only those Bidders whose Technical and Commercial proposals are complete and acceptable shall be opened online through website <https://kpt.nprocure.com> in the presence of Bidders or their authorized representatives on a suitable day to be intimated separately later.

2.7 CLARIFICATION

Since the tender involves selection based on pre-qualification criteria, the authorized officials of EMPLOYER will examine and seek clarification, if any, from the uploaded documents during technical and financial evaluation stage.

2.8 DUTIES AND TAXES

The quoted rates of the bidders shall include of all taxes, duties, etc., excluding applicable GST. TDS as applicable shall be deducted at source by DPA in accordance with IT, GST etc. Further, the contractor has to raise GST tax invoice timely, notwithstanding reimbursement/ payment from DPA and to comply timely with GST statutory requirements i.e remittance, filing, etc. DPA shall reimburse the GST portion on reflection of Input tax credit at GST portal. Any new taxes, levies, duties

imposed after submission of bid shall be considered by the Employer on production of documentary evidence.

2.9 SIGNING OF THE CONTRACT

The successful Bidder shall be required to execute a Formal contract in accordance with the requirement of the EMPLOYER within 14 days from the date of issue of the acceptance of the Bid by the EMPLOYER, or within such extended time as may be permitted by the EMPLOYER in this behalf. This agreement shall be in the Proforma indicated at **Annexure-4** of the bid.

2.10 CORRUPT OR FRAUDULENT PRACTICES:

The Employer requires that Bidders/Suppliers/Contractors under this contract, observe the highest standard of ethics during the procurement and execution of this contract. In pursuance of this policy, the Employer:

(a) Defines, for the purpose of these provisions, the terms set forth below as follows:

I. "corrupt practice" means the offering, giving, receiving, or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution; and

II. "fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Employer, and includes collusive practice among bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Employer of the benefits of free and open competition.

(b) Will reject a proposal for award of work if the employer determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question.

(c) Will declare a Bidder ineligible, either indefinitely or for a stated period of time, to be awarded contract/contracts if he at any time determines that the Bidder has engaged in corrupt or fraudulent practices in competing for, or in executing the contract.

Section 3

GENERAL CONDITIONS OF CONTRACT

SECTION- 3

GENERAL CONDITIONS OF CONTRACT

Appendix to Tender (GCC)

Item	Sub Clause	Data
Employer's Name and Address	-	DEENDAYAL PORT AUTHORITY PO. BOX NO. 50, AO. BUILDING, GANDHIDHAM(KACHCHH)
Governing Law	3.1.4 of GCC	Constitution of India
Ruling Language	3.1.4 of GCC	English
Language for Communication	3.1.3 of GCC	English
Right to Access to the Site	3.2.1 of GCC	On commencement of works subject to interfacing with other contractor
Amount of Performance Security	3.4.2 of GCC	10% of the Accepted Contract value in the form of FDR/Digital Transfer Mode/ Bank Guarantee on any Nationalized / Scheduled Bank (except Co-operative Bank) from any branch in India, encashable in Gandhidham. Valid till 30 days' after final bill settlement.
Working Hours	3.5.5 of GCC	Dredging operation shall be carried out round the clock.
Commencement of Work	3.7.1 of GCC	The Engineer shall give the Contractor not less than 7 days' notice of the Commencement date. Unless otherwise stated, the Commencement date shall be within 30 days after the Contractor receives the Letter of Acceptance.
Liquidated damages	3.7.2.1 of GCC	0.5% per week or part thereof subject to maximum of 10% of contract value
Time for Completion of the Work	3.7.2 of GCC	3 years (36 months) from the date commencement of the dredging work
Right to Vary	3.12.1 of GCC	Plus / Minus 30% of quantity
Escalation (Price adjustment)	3.12.3 of GCC	Only fuel escalation is payable as price adjustment.

Retention money	3.13.0 of GCC	Retention money shall be deducted from each running bill @ 5% subject to a maximum accumulation of 5% of contract price.
Item	Sub Clause	Data
		Retention Money shall be refunded within 14 days from the date of payment of final bill
Limitation of Liability	3.16.6 of GCC	Limited to total value of the Contract
Schedule of Rate	3.27.2 of GCC	General Payment terms
Idle time charges per hour	3.29.0 of GCC	Idle time charges are not payable for idling of any dredger or other equipment including the men and machinery for reasons whatsoever under this contract and no such claims shall be entertained even at a later date

3.1 GENERAL PROVISIONS

In the Conditions of Contract (“these Conditions”), which include Definitions Specific Conditions and these General Conditions, the following words and expressions shall have the meanings stated. Words indicating persons or parties include corporations and other legal entities, except where the context requires otherwise.

3.1.1 Definitions

In the Conditions of Contract (“these Conditions”), which include Specific Conditions and these General Conditions, the following words and expressions shall have the meanings stated. Words indicating persons or parties include corporations and other legal entities, except where the context requires otherwise.

3.1.1.1 “Contract” means the contract agreement, special conditions of contract, general conditions of contract, technical requirements (including schedule of requirements and technical specifications, drawings), Notice Inviting Tender, replies issued to pre-bid queries, addenda issued if any, Contractor’s bid and original price and delivery schedules, the Employer / Board’s notification of award, correspondence the Employer / Board had exchanged with the bidder till and after award of the contract and further documents (if any) which are listed in the Contract Agreement or in the Letter of Acceptance.

3.1.1.2 “Contract Agreement” means the contract agreement (if any) referred to in Sub-Clause 3.1.6 [Contract Agreement].

3.1.1.3 “Contractor’s documents” means the calculations, computer programs and other software, drawings, manuals, models and other documents of a technical nature (if any) supplied by the Contractor under the Contract.

3.1.1.4 “Letter of Acceptance” means the letter of formal acceptance, signed by the Employer, of the Tender submitted by the tenderer, including any annexed documents.

3.1.1.5 “Letter of Tender” means the document entitled letter of tender, which was completed by the contractor and includes the signed offer to the Employer for the Works.

3.1.1.6 “Specification” means the document entitled specification, as included in the Contract, and any additions and modifications to the specification in accordance with the Contract. Such document specifies the works.

3.1.1.7 “Drawings” means the drawings of the Works, as included in the Contract, and any additional and modified drawings issued by (or on behalf of) the Employer in accordance with the Contract.

3.1.1.8 “Schedules” means the document(s) entitled schedules, completed by the Contractor and submitted with the Letter of Tender, as included in the Contract. Such document may include the Bill of Quantities, data, lists, and schedules of rates and/or prices.

3.1.1.9 “Tender” means the Letter of Tender and all other documents, which the Contractor submitted with the Letter of Tender, as included in the Contract.

3.1.1.10 “Appendix to tender” means the completed pages entitled appendix to tender, which are appended, to form part of the Letter of Tender.

3.1.1.11 “Bill of Quantities” means the documents so named which include the priced bill of quantities forming part of the tender.

3.1.1.12 “Party” means the Employer or the Contractor, as the context requires.

3.1.1.13 “Employer” means the person named as employer in the Appendix to tender and the legal successors in title to this person.

3.1.1.14 “Contractor” means the person(s) named as contractor in the Letter of Tender accepted by the Employer and the legal successors in title to this person(s).

3.1.1.15 “Contractor’s Representative” means the person named by the Contractor in the Contract or appointed from time to time by the Contractor under Sub-Clause 3.4.3 [Contractor’s Representative], who acts on behalf of the Contractor.

3.1.1.16 “Employer’s Personnel” means the Engineer, the assistants referred to in **Sub-Clause 3.3.2 [Delegation by the Engineer]** and all other staff, labor and other employees of the Engineer and of the Employer; and any other personnel notified to the Contractor, by the Employer or the Engineer, as Employer’s Personnel.

3.1.1.17 “Contractor’s Personnel” means the Contractor’s Representative and all personnel whom the Contractor utilizes on Site, who may include the staff, labour and other employees of the Contractor and of each Subcontractor; and any other personnel assisting the Contractor in the execution of the works.

3.1.1.18 “Sub-contractor” means any person named in the Contract as a subcontractor, or any person appointed as a subcontractor, for a part of the Works; and the legal successors in title to each of these persons.

3.1.1.19 “Base Date” means the date 28 days prior to the latest date for submission of the Tender.

3.1.1.20 Commencement Date' means date as agreed between the parties.

3.1.1.21 'Time for Completion' means the time for completing the Works.

3.1.1.22 “Tests on Completion” means the tests which are specified in the contract or agreed by both Parties or instructed as a Variation, and which are carried out under Clause 3.8 [Tests on Completion] before the Works or a Section (as the case may be) are taken over by the Employer.

3.1.1.23 “Taking-Over Certificate” means a certificate issued under [Employer’s Taking Over]

3.1.1.24 “Tests after Completion” means the tests (if any), which are specified in the Contract, and which are carried out in accordance with the provisions of the Particular Conditions after the Works or a Section (as the case may be) are taken over by the employer.

3.1.1.25 “Defects Notification Period” means the period for notifying defects in the Works or a Section. (as the case may be) under, calculated from the date on Which the Works or Section is completed as certified under Sub-Clause 3.9.1 [Taking Over of the Works and Sections].

3.1.1.26 “Performance Certificate” means the certificate issued under Sub-Clause 3.10.9 [Performance Certificate].

3.1.1.27 “Day” means a calendar day and **“Year”** means 365 days.

3.1.1.28 “Accepted contract Amount” means the amount accepted in the Letter of Acceptance for the execution and completion of the Works and the remedying of any defects.

3.1.1.29 “Contract Price” means the price defined in Sub- **Clause 3.13.1** [The Contract Price] and includes adjustments in accordance with the Contract.

3.1.1.30 “Cost” means all expenditure reasonably incurred (or to be incurred) by the Contractor, whether on or off the Site, including overhead and similar charges, but does not include profit.

3.1.1.31 “Final Payment Certificate” means the payment certificate issued under Sub-Clause 3.13.12 [Issue of Final Payment Certificate].

3.1.1.31 “Final Statement” means the statement defined in Sub-Clause 3.13.10 [Application for Final Payment Certificate].

3.1.1.32 “Currency” means Indian Rupees in which part (or all) of the Contract Price is payable.

3.1.1.33 “Interim Payment Certificate” means a payment certificate issued under Clause 3.13 [Contract Price and Payment], other than the Final Payment Certificate.

3.1.1.34 “Payment Certificate” means a payment certificate issued under Clause 3.13 [Contract Price and Payment].

3.1.1.35 “Provisional Sum” means a sum (if any), which is specified in the Contract as a provisional sum, for the execution of any part of the Works or for the supply of Plant, Materials or services under Sub-Clause 3.12.5 [Provisional Sums].

3.1.1.36 “Security Deposit” means the accumulated retention moneys, which the employer retains under Sub-Clause 3.13.3 [Application for Interim Payment Certificates] and pays under Sub-Clause 3.13.8 [Payment of Retention Money].

3.1.1.37 “Statement” means a statement submitted by the Contractor as part of an application, under Clause 3.13 [Contract Price and Payment] for a payment certificate.

3.1.1.38 “Contractor’s Equipment” shall include but not limited to Dredgers, Tugs, Survey launch/vessel, other floating craft fully equipped with necessary instruments, gadgets, appliances and things of whatsoever nature required for the execution, completion and maintenance of the works and for remedying any defects therein. However, Contractor’s Equipment excludes Temporary Works, Employer’s Equipment (if any), Plant, Materials and any other things intended to form or forming part of the Permanent Works.

3.1.1.39 “Goods” means Contractor’s Equipment, Materials, Plant and Temporary Works, or any of them as appropriate except dredgers.

3.1.1.40 “Materials” means things of all kinds (other than Plant) intended to form or forming part of the Permanent Works, including the supply-only materials (if any) to be supplied by the Contractor under the Contract.

3.1.1.41 “Permanent Works” means the permanent works to be executed by the Contractor under the Contract.

3.1.1.42 “Plant” means the apparatus, machinery and vehicles intended to form or forming part of the Permanent Works.

3.1.1.43 “Section” means a part of the Works specified in the contract as a Section (if any).

3.1.1.44 “Temporary Works” means all temporary works of every kind (other than contractor’s Equipment) required on Site for the execution and completion of the Permanent Works and the remedying of any defects.

3.1.1.45 “Works” mean the Permanent Works and the Temporary Works, or either of them as appropriate. Which inter alia mean Dredging of the channel to the depth/width as indicated and maintaining the said depth/width and incidental work including but not limited to designing, engineering, financing, equipping, maintaining data, preparing charts/carrying out surveys and all other works which the Contractor is expected to carry out or which the Contractor is required to perform or do for achieving the required depth/width or to meet the specifications stipulated in the Contract.

3.1.1.46 “Contractor’s documents” means the calculations, computer programs and other software, drawings, manuals, models and other documents of a technical nature (if any) supplied by the Contractor under the Contract.

3.1.1.47 “Country” means the country in which the Site (or most of it) is located, where the Permanent Works are to be executed.

3.1.1.48 “Employer’s equipment” means the apparatus, machinery and vehicles (if any) made available by the Employer for the use of the contractor in the execution of the Works, as stated in the specification; but does not include Plant which has not been taken over by the Employer.

3.1.1.49 “Force Majeure” is defined in Clause 3.18 [Force Majeure].

3.1.1.50 “Laws” means all national (or state) legislation, statutes, ordinances and other laws, and regulations and by-laws of any legally constituted public authority.

3.1.1.51 “Performance Security” means the security (or securities, if any) under Sub-Clause 3.4.2 [Performance Security].

3.1.1.52 “Site” means the places where the Permanent Works are to be executed and to which Plant and materials are to be delivered, and any other places as may be specified in the Contract as forming part of the Site.

3.1.1.53 “Unforeseeable” means not reasonably foreseeable by an experienced contractor by the date for submission of the Tender.

3.1.1.54 “Variation” means any change to the Works, which is instructed or approved as a variation under Clause 3.12 [Variations and Adjustments].

3.1.1.55 ‘Contractor's Equipment’ means all apparatus, machinery, vehicles, vessels, facilities and other things required for the execution of the Works but does not include Materials or Plant.

3.1.1.56 Engineer means person delegate by Employer for the purpose of the Contract.

3.1.2 Interpretation

In the Contract, except where the context requires otherwise:

- (a) words indicating one gender include all genders;
- (b) words indicating the singular also include the plural and words indicating the plural also includes the singular;
- (c) provisions including the word “agree”, “agreed” or “agreement” require the agreement to be recorded in writing, and
- (d) “written” or “in writing” means hand-written, type-written, printed or
- (e) electronically made, and resulting in a permanent record.

The marginal words and other headings shall not be taken into consideration in the interpretation of these Conditions.

3.1.3 Communications

Wherever these Conditions provide for the giving or issuing of approvals, certificates, consents, determinations, notices and requests, these communications shall be:

- (a) In writing and delivered by hand (against receipt), sent by mail or courier, or

transmitted using any of the agreed systems of electronic transmission as stated in the Appendix to Tender; and

- (b) Delivered, sent or transmitted to the address for the recipient's communications as stated in the Appendix to Tender. However:
 - (i) If the recipient gives notice of another address, communications shall thereafter be delivered accordingly; and
 - (ii) If the recipient has not stated otherwise when requesting an approval or consent, it may be sent to the address from which the request was issued.

Approvals, certificates, consents and determinations shall not be unreasonably withheld or delayed. When a certificate is issued to a Party' the certifier shall send a copy to the other Party. When a notice is issued to a Party, by the other Party or the Engineer, a copy shall be sent to the Engineer or the other Party, as the case may be.

3.1.4 Law and Language

The Contract shall be governed by the law of the country (or other Jurisdiction) stated in the Appendix to Tender.

If there are versions of any part of the Contract, which are written in more than one language, the version, which is in the ruling language stated in the Appendix to Tender, shall prevail.

The language for communications shall be that stated in the Appendix to Tender. If no language is stated there, the language for communications shall be the language in which the Contract (or most of it) is written.

3.1.5 Priority of Documents

The documents forming the Contract are to be taken as mutually explanatory of one another. For the purposes of interpretation, the priority of the documents shall be in accordance with the following sequence:

- (a) The contract Agreement (if completed),
- (b) The Letter of Acceptance / Firm work order
- (c) The priced Bill of Quantities,
- (d) Bid Clarification,
- (e) The Technical Specification, Special conditions of contract and Information in Appendix to Tender.

- (f) The General conditions of contract.
- (g) The Drawings and Annexures.
- (h) All Post bid correspondence and any other document forming part of contract.

If any ambiguity or discrepancy is found in the documents, the Engineer shall issue any necessary clarification or instruction.

3.1.6 Agreement

The Parties shall enter into a Contract Agreement within 14 days, after the Contractor receives the Letter of Acceptance, unless they agree otherwise. The Contract Agreement shall be in the format annexed to the bid. The costs of stamp duties and similar charges (if any) imposed by law in connection with entry into the Contract Agreement shall be borne by the tenderer.

3.1.7 Assignment

The contractor shall not assign the contract or any part thereof or any benefit or interest therein or there under (otherwise than by a change in favour of the contractor's Banker of any money due to or to become due under this contract without the prior written consent of the Employer.

3.1.8 Care and Supply of Documents

The Specification and Drawings shall be in the custody and care of the Employer. Unless otherwise stated in the Contract, two copies of the Contract and of each subsequent Drawing shall be supplied to the Contractor, who may make or request further copies at the cost of the Contractor.

Each of the Contractor's Documents shall be in the custody and care of the Contractor, unless and until taken over by the Employer. Unless otherwise stated in the Contract, the Contractor shall supply to the Engineer six copies of each of the Contractor's Documents.

The Contractor shall keep, on the Site, a copy of the Contract, publications named in the Specification, the Contractor's Documents (if any), the Drawings and Variations and other communications given under the Contract. The Employer's Personnel shall have the right of access to all these documents at all reasonable times.

If a Party becomes aware of an error or defect of a technical nature in a document, which was prepared for use in executing the Works, the Party shall promptly give notice to the other Party of such error or defect.

3.1.9 Delayed Drawings or Instructions

The Contractor shall give notice to the Engineer whenever the works are likely to be delayed or disrupted if any necessary drawing or instruction is not issued to the Contractor within a particular time, which shall be reasonable. The notice shall include details of the necessary drawing or instruction, details of why and by when it should be issued, and details of the nature and amount of the delay or disruption likely to be suffered if it is late.

If the Contractor suffers delay and/or incurs Cost as a result of a failure of the Engineer to issue the notified drawing or instruction within a time which is reasonable and is specified in the notice with supporting details, the Contractor shall give a further notice to the Engineer and shall be entitled subject to Sub-Clause 3.19.1 [Contractor's Claims] to:

- a. An extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 3.7.4 [Extension of Time for Completion], and
- b. Payment of any such Cost-plus reasonable profit, which shall be included in the Contract Price.

After receiving this further notice, the Engineer shall proceed in accordance with Sub-Clause 3.3.4 [Determinations] to agree or determine these matters.

However, if and to the extent that the Engineer's failure was caused by any error or delay by the Contractor, including an error in, or delay in the submission of, any of the Contractor's Documents, the Contractor shall not be entitled to such extension of time, Cost or profit.

3.1.10 Employer's Use of Contractor's Documents

As between the Parties, the Contractor shall retain the copyright and other intellectual property rights in the Contractor's Documents and other design documents made by (or on behalf of) the Contractor.

The Contractor shall be deemed (by signing the Contract) to give to the Employer a non-terminable transferable non-exclusive royalty-free License to copy, use and Communicate the Contractor's Documents, including making and using modifications of them. This License shall:

- (a) apply throughout the actual or intended working life (whichever is longer) of the

relevant parts of the Works,

- (b) entitle any person in proper possession of the relevant part of the Works to copy, use and communicate the Contractor's Documents for the purposes of completing, operating, maintaining, altering, adjusting, repairing and demolishing the Works, and
- (c) in the case of Contractor's Documents, which are in the form of computer programs and other software, permit their use on any computer on the Site and other places as envisaged by the Contract, including replacements of any computers supplied by the Contractor.

The Contractor's Documents and other design documents made by (or on behalf of) the Contractor shall not, without the Contractor's consent, be used, copied or communicated to a third party by (or on behalf of) the Employer for purposes other than those permitted under this Sub-Clause.

The Contractor's Documents and other design documents made by (or on behalf of) the Contractor shall not, without the Contractor's consent, be used, copied or communicated to a third party by (or on behalf of) the Employer for purposes other than those permitted under this Sub-Clause.

3.1.11 Contractor's use of Employer's Documents

As between the Parties, the Employer shall retain the copyright and other intellectual property rights in the Specification, the Drawings and other documents made by (or on behalf of) the Employer. The Contractor may, at his cost, copy, use, and obtain communication of these documents for the purposes of the Contract. They shall not, without the Employer's consent, be copied, used or communicated to a third party by the Contractor, except as necessary for the purposes of the Contract.

3.1.12 Confidential Details

The Contractor shall disclose all such confidential and other information as the Engineer may reasonably require in order to verify the Contractor's compliance with the Contract.

3.1.13 Compliance with Laws

The Contractor shall, in performing the Contract, comply with applicable Laws. Unless otherwise:

- (a) the Employer shall have obtained (or shall obtain) the planning, zoning or

similar permission for the Permanent works, and any other permissions described in the Specification as having been (or being) obtained by the Employer; and the Employer shall indemnify and hold the Contractor harmless against and from the consequences of any failure to do so; and

(b) the Contractor at his cost shall give all notices, pay all taxes, duties and fees, and obtain all permits, licenses and approvals, as required by the Laws in relation to the execution and completion of the Works and the remedying of any defects; and the Contractor shall indemnify and hold the Employer harmless against and from the consequences of any failure to do so.

3.1.14 Joint and Several Liability

Companies/Contractors may jointly undertake contract/contracts. The number of partners in JV/Consortium shall be limited to maximum of three. Each entity would be jointly and severally responsible for completing the task as per the contract, however declaration of the Lead member (JV has to designate one partner as Lead Member in their MOU) to be indicated by bidders. The firms with at least 26% equity holding each are allowed to jointly meet the eligibility criteria.

- (a) A legally binding Joint venture / Consortium Agreement signed by authorized signatories of all the partners of the JV/Consortium, as per the proforma at Annexure-I shall be enclosed with the bid.
- (b) Power of attorney duly executed and signed by legally authorized signatories of all the partners, authorizing the Lead Partner (a) to submit bid, negotiate and conclude contract and incur all liabilities therewith on behalf of the partner(s) of the JV/Consortium during the bidding process; and (b) in the event of a successful bid, to incur liabilities and receive instructions for and on behalf of the partner(s) of the JV /Consortium and to carry out the entire execution of the contract including payment, exclusively through Lead Partner, as per the proforma at Annexure-II, which shall be duly authenticated by a notary public or equivalent certifying authority, shall be enclosed with the bid.
- (c) The bid and in the case of the successful bidder, the Agreement, shall be signed and / or executed in such a manner for making it legally binding on all partners (including operative parts of the ensuing Contract in respect of Agreement of Arbitration, etc.). The Contract shall be signed by legally authorized signatories of all partners.
- (d) The Lead Partner shall be authorized to receive instructions for and on behalf of the partners of the Joint venture and entire execution of the Contract including payment shall be carried out exclusively through the Lead Partner. A Statement to this effect should be included in the Joint Venture Agreement.
- (e) All partners of the Joint Venture shall be liable jointly and severally for the execution of the Contract in accordance with the Contract terms, and a

Statement to this effect should be included in the Joint Venture Agreement.

- (f) Bid Security as required shall be furnished by Lead Member of Joint venture.
- (g) Performance Guarantee, as required, will be furnished by Lead Member of Joint venture.
- (h) Participation by a firm in more than one JV /Consortium is not permissible. A firm who submits bid on individual capacity is not eligible to be a partner of a JV /Consortium. In case a firm's name appears in more than one bid then both application may be rejected.
- (i) Each partner must submit the complete documentation, or portions applicable thereto, required qualifying the firm for bidding.
- (j) All the partners of the JV/Consortium shall be jointly and severally liable for due performance, recourse/sanctions within the joint venture in the event of default of any partner and arrangements for providing the required indemnities.
- (k) Notwithstanding demarcation or allotment of work among the partners, each partner shall be liable for non-performance of the whole contract irrespective of their demarcation or share of work.
- (l) The Lead Partner shall be authorized to act on behalf of the JV/ Consortium.
- (m) All the correspondences between the Employer and the contractor shall be routed through the Lead Partner.
- (n) In the event of default by the Lead Partner, it shall be construed as default of the Contractor; and Employer will take action under relevant clause(s) of the Bid Document and/or General Terms and Conditions of Contract.
- (o) An undertaking that all the partners are jointly and severally liable to the Employer for the performance of the contract shall be enclosed with the bid
- (p) In the event of any partner leaving the JV, it shall be intimated to the Employer within 30 days by other partner(s). Failure to do so shall be construed as default of the contractor and the Employer may take action under relevant clause(s) of the Bid Document and/or General Terms and Conditions of Contract.
- (q) The contractor shall not alter its composition or legal status without the prior written permission of the Employer. Failure to do so shall be construed as default of the contractor and the Employer may take action under relevant clause(s) of the Bid Document and/or General Terms and Conditions of Contract.
- (r) One of the partners of JV/Consortium should have downloaded the bid documents

3.1.15 Details to be Confidential

The Contractor shall treat the details of the contract as private and confidential, except to the extent necessary to carry out obligations under it or to comply with applicable laws. The Contractor shall not publish, permit to be published or disclose any particulars of the works in any trade or technical paper or elsewhere without the previous agreement of the Employer.

3.2 THE EMPLOYER

3.2.1 Right of Access to the Site

The Employer shall give the Contractor right of access to and possession of, all parts of the Site within the time (or times) stated in the Appendix to Tender. The right and possession may not be exclusive to the Contractor. If, under the Contract, the Employer is required to give (to the Contractor) possession of any foundation, structure, plant or means of access, the Employer shall do so in the time and manner stated in the Specification. However, the Employer may withhold any such right or possession until the Performance Security has been received.

If no such time is stated in the Appendix to Tender, the Employer shall give the Contractor right of access to, and possession of, the Site within such times as may be required to enable the Contractor to proceed in accordance with the programme submitted under Sub-Clause 3.7.3 [Programme].

If the Contractor suffers delay and/or incurs Cost as a result of a failure by the Employer to give any such right or possession within such time, the Contractor shall give notice to the Engineer and shall be entitled subject to Sub-Clause 3.19.1 [Contractor's Claims] to:

- (a) An extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 3.7.4 [Extension of Time for Completion], and
- (b) Payment of any such Cost-plus reasonable profit, which shall be included in the Contract Price.

After receiving this notice, the Engineer shall proceed in accordance with Sub-Clause 3.3.4 [Determinations] to agree or determine these matters.

However, if and to the extent that the Employer's failure was caused by any error or delay by the Contractor, including an error in, or delay in the submission of, any of the Contractor's Documents, the Contractor shall not be entitled to such extension of time Cost or profit.

3.2.2 Permits, Licenses or Approvals

The Employer shall (where he is in a position to do so) provide reasonable assistance to the Contractor at the request of the Contractor:

- (a) by obtaining copies of the Laws of the Country which are relevant to the Contract but are not readily available, and

(b) for the Contractor's applications for any permits, Licenses or approvals required by the Laws of the Country:

(i) which the Contractor is required to obtain under Sub- Clause 3.1.13 [Compliance with Laws],

(ii) for the delivery of Goods, including clearance through customs, and

(iii) for the export of Contractors Equipment when it is removed from the Site.

3.2.3 Employer's or Personnel

The Employer shall be responsible for ensuring that the Employer's Personnel and the Employer's other contractors on the Site:

(a) Co-operate with the Contractor's efforts under Sub-Clause 3.4.6 [Co-operation], and

(b) Take actions similar to those, which the Contractor is required to take under sub paragraphs (a), (b) and (c) of Sub-Clause 3.4.8[Safety Procedures] and under Sub- Clause 3.4.18 [Protection of the Environment].

3.2.4 Employer's Claims

If the Employer considers himself to be entitled to any payment under any Clause of these Conditions or otherwise in connection with the Contract, and/or to any extension of the Defects Notification Period, the Employer or the Engineer shall give notice and particulars to the Contractor. However, notice is not required for payments due under Sub-Clause 3.4.19 [Electricity].

The notice shall be given as soon as practicable after the Employer became aware of the event or circumstances giving rise to the claim. A notice relating to any extension of the Defects Notification Period shall be given before the expiry of such period.

The particulars shall specify the Clause or other basis of the claim and shall include substantiation of the amount and/or extension to which the Employer considers himself to be entitled in connection with the Contract. The Engineer shall then proceed in accordance with Sub-Clause 3.3.4 [Determinations] to agree or determine

(i) the amount (if any) which the Employer is entitled to be paid by the Contractor, and/or (ii) the extension (if any) of the Defects Notification Period.

This amount may be included as a deduction in the Contract Price and Payment Certificates. The Employer shall only be entitled to set off against or make any deduction from an amount certified in a Payment Certificate, or to otherwise claim against the Contractor, in accordance with this Sub-Clause.

3.3. THE ENGINEER

3.3.1 Engineer's Duties and Authority

The Employer shall appoint the Engineer who shall carry out the duties assigned to him in the Contract. The Engineer's staff shall include suitably qualified engineers and other professionals

The Engineer shall have no authority to amend the Contract.

The Engineer may exercise the authority attributable to the Engineer as specified in or necessarily to be implied from the Contract. The Engineer shall obtain prior approval of the Employer for giving any instructions to the Contractor or taking any action on aspects, which are beyond the scope of the contract. The Employer undertakes not to impose further constraints on the Engineer's authority, except as agreed with the Contractor.

However, whenever the Engineer exercises a specified authority for which the Employer's approval is required, then (for the purposes of the Contract) the Employer shall be deemed to have given approval.

Except as otherwise stated in these Conditions:

- (a) whenever carrying out duties or exercising authority, specified in or implied by the Contract, the Engineer shall be deemed to act for the Employer;
- (b) the Engineer has no authority to relieve either Party of any duties, obligations or responsibilities under the Contract; and
- (c) any approval, check, certificate, consent, examination, inspection, instruction, notice, proposal, request, test or similar act by the Engineer (including absence of disapproval) shall not relieve the Contractor from any responsibility he has under the Contract, including responsibility for errors, omissions, discrepancies and non-compliances.

3.3.2 Delegation by the Engineer

The Engineer may from time to time assign duties and delegate authority to assistants and may also revoke such assignment or delegation. These assistants may include a resident engineer, and/or Independent inspectors appointed to inspect and/or test items of Plant and/or Materials. The assignment, delegation or revocation shall be in writing and shall not take effect until copies have been received by both Parties. However, unless otherwise agreed by both Parties, the Engineer shall not delegate the authority to determine any matter in accordance with Sub- Clause 3.3.4

[Determinations].

Assistants shall be suitably qualified persons, who are competent to carry out these duties and exercise this authority; and who are fluent in the language for communications defined in Sub-Clause 3.1.4 [Law and Language].

Each assistant, to whom duties have been assigned or authority has been delegated, shall only be authorized to issue instructions to the Contractor to the extent defined by the delegation. Any approval, check, certificate, consent, examination, inspection, instruction, notice, proposal, request, test, or similar act by an assistant, in accordance with the delegation, shall have the same effect as though the act had been an act of the Engineer.

However:

(a) any failure to disapprove any work, Plant or Materials shall not constitute approval, and shall therefore not prejudice the right of the Engineer to reject the work, Plant or Materials;

(b) if the Contractor questions any determination or instruction of an assistant, the Contractor may refer the matter to the Engineer, who shall promptly confirm, reverse or vary the determination or instruction.

3.3.3 Instructions of the Engineer

The Engineer may issue to the Contractor (at any time) instructions and additional or modified Drawings, which may be necessary for the execution of the works and the remedying of any defects, all in accordance with the Contract. The Contractor shall only take instructions from the Engineer, or from an assistant to whom the appropriate authority has been delegated under this Clause. If an instruction constitutes a Variation, Clause 3.12 [Variations and Adjustments] shall apply.

The Contractor shall comply with the instructions given by the Engineer or delegated assistant, on any matter related to the Contract. Whenever practicable, their instructions shall be given in writing. If the Engineer or a delegated assistant:

(a) gives an oral instruction,

(b) receives a written confirmation of the instruction, from (or on behalf of) the Contractor, within two working days after giving the instruction, and does not reply by issuing a written rejection and/or instruction within two working days after receiving the confirmation, then the confirmation shall constitute the written instruction of the Engineer or delegated assistant (as the case may be).

3.3.4 Determinations

Whenever these Conditions provide that the Engineer shall proceed in accordance with this Sub-Clause 3.3.4 to agree or determine any matter, the Engineer shall consult with each Party in an endeavor to reach agreement. If agreement is not achieved, the Engineer shall make a fair determination in accordance with the Contract, taking due regard of all relevant circumstances.

The Engineer shall give notice to both Parties of each agreement or determination, with supporting particulars. Each Party shall give effect to each agreement or determination unless and until revised under Clause 3.19 [Claims, Disputes and Arbitration].

3.3.5 Management Meetings

The Engineer or the Contractor's Representative may require the other to attend a management meeting in order to review the arrangements for future work. The Engineer shall record the business of management meetings and supply copies of the record to those attending the meeting.

3.4. THE CONTRACTOR

3.4.1 Contractor's General Obligations

The Contractor shall design (to the extent specified in the contract), execute and complete the Works in accordance with the Contract and shall remedy any defects in the Works.

The Contractor shall, whenever required by the engineer, submit details of the arrangement and methods, which the contractor propose is to adopt for the execution of the works. No significant alteration to this arrangements and methods shall be made without this having previously been notified to the engineer.

3.4.2 Performance Security

The Contractor shall obtain (at his cost) and submit a Performance Security of 10% of the accepted contract value for proper performance, in the amount, currencies and mode stated in the Appendix to Tender.

The Contractor shall deliver the Performance Security to the Employer within 21 days after receiving the Letter of Acceptance and shall send a copy to the Engineer.

The Performance Security shall be issued by an entity and from within a country (or other, jurisdiction) approved by the Employer, and shall be in the form annexed to the Particular Conditions or in another form approved by the Employer.

The Contractor shall ensure that the Performance Security is valid and enforceable until the Contractor has executed and completed the works and remedied any defects. If the terms of the Performance Security specify its expiry date, and the Contractor has not become entitled to receive the Performance Certificate by the date 21 days prior to the expiry date, the Contractor shall extend the validity of the Performance Security until the Works have been completed and any defects have been remedied.

The Employer shall not make a claim under the Performance Security, except for amounts to which the Employer is entitled under the Contract in the event of:

- (a) Failure by the Contractor to extend the validity of the Performance Security as described in the preceding paragraph, in which event the Employer may claim the full amount of the Performance Security,
- (b) Failure by the Contractor to pay the Employer an amount due, under Clause 3.19 [Claims, Disputes and Arbitration], within 42 days after this agreement or determination,
- (c) Failure by the Contractor to remedy a default within 42 days after receiving the Employer's notice requiring the default to be remedied, or
- (d) Circumstances, which entitle the Employer to termination under Sub- Clause 3.14.2 [Termination by Employer], irrespective of whether notice of termination has been given.

The Employer shall indemnify and hold the Contractor harmless against and from all damages, losses and expenses (including legal fees and expenses) resulting from a claim under the Performance Security to the extent to which the Employer was not entitled to make the claim.

The Employer shall return the Performance Security corresponding to the value of work of dredging, to the Contractor within one month after making final payment.

3.4.3 Contractor's Representative

The Contractor shall appoint the Contractor's Representative and shall give him all authority necessary to act on the Contractor's behalf under the Contract.

Unless the Contractor's Representative is named in the Contract, the Contractor shall, prior to the Commencement Date, submit to the Engineer for consent the name and particulars of the person the Contractor proposes to appoint as Contractor's Representative. If consent is withheld or subsequently revoked, or if the appointed person fails to act as Contractor's Representative, the Contractor shall similarly submit

the name and particulars of another suitable person for such appointment.

The Contractor shall not, without the prior consent of the Employer, revoke the appointment of the Contractor's Representative or appoint a replacement.

The whole time of the Contractor's Representative shall be given to directing the performance of the Contract. If the Contractor's Representative is to be temporary absent from the Site during the execution of the Works, a suitable replacement person shall be appointed.

The Contractor's Representative and all these persons shall be fluent in the language for communications defined in Sub- Clause 3.1.4 [Law and Language].

The Contractor's Representative and all their persons shall also be fluent in English and Hindi, if Contractor's Representative, or these persons, is not fluent in the above languages, the Contractor shall make a competent interpreter available during all working hours.

3.4.4 Sub-contractors

Sub-contracting or sub- letting of any portion or whole of the work shall not be permitted.

3.4.5 Assignment of Benefit of Subcontract - deleted

3.4.6 Co-operation

The Contractor shall, as specified in the Contract allow appropriate opportunities for carrying out work to:

- (a) the Employer's Personnel,
- (b) any other contractors employed by the Employer, and
- (c) the personnel of any legally constituted public authorities, who may be employed in the execution on or near the Site of any work not included in the Contract.

Any such instruction shall constitute a Variation if and to the extent that it causes the Contractor to incur Unforeseeable Cost. Services for these personnel and other contractors may include the use of Contractor's Equipment, Temporary Works or access arrangements, which are the responsibility of the Contractor.

3.4.7 Setting Out

The Contractor shall set out the Works in relation to original Setting Out points, lines and levels of reference specified in the Contract or notified by the Engineer. The Contractor shall be responsible for the correct positioning of all parts of the Works, and

shall rectify any error in the positions, levels, dimensions or alignment of the Works.

The Employer shall be responsible for any errors in these specified or notified items of reference, but the Contractor shall use reasonable efforts to verify their accuracy before they are used.

If the Contractor suffers delay and/or incurs Cost from executing work which was necessitated by an error in these items of reference, and an experienced contractor could not reasonably have discovered such error and avoided this delay and/or Cost, the Contractor shall give notice to the Engineer and shall be entitled subject to Sub-Clause 3.19.1 [Contractor's Claims] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 3.7.4 [Extension of Time for Completion], and
- (b) Payment of any such Cost-plus reasonable profit, which shall be included in the Contract Price.

After receiving this notice, the Engineer shall proceed in accordance with Sub-Clause 3.3.4 [Determinations] to agree or determine (i) whether and (if so) to what extent the error could not reasonably have been discovered, and (ii) the matters described in subparagraphs (a) and (b) above related to this extent.

3.4.8 Safety Procedures

The Contractor shall:

- (a) comply with all applicable safety regulations,
- (b) take care for the safety of all persons entitled to be on the Site,
- (c) use reasonable efforts to keep the Site and Works clear of unnecessary obstruction so as to avoid danger to these persons,
- (d) provide fencing, lighting, guarding and watching of the Works until completion and taking over under Clause 3.9 [Employer's taking Over], and
- (e) Provide any Temporary Works (including roadways, footways, guards and fences), which may be necessary, because of the execution of the Works, for the use and protection of the public and of owners and occupiers of adjacent land.
- (f) shall have HSE plan in place and shall submit HSE plan to the Engineer prior to commencement of work for approval and implementation. HSE monthly return shall be submitted.

(g) Shall carry out Risk Assessment as per standard practice.

3.4.9 Quality Assurance

The Contractor shall institute a quality assurance system to demonstrate compliance with the requirements of the Contract. The system shall be in accordance with the details stated in the Contract. The Engineer shall be entitled to audit any aspect of the system.

Details of all procedures and compliance documents shall be submitted to the Engineer for information before each design and execution stage is commenced.

When any document of a technical nature is issued to the Engineer, evidence of the prior approval by the Contractor himself shall be apparent on the document itself.

Compliance with the quality assurance system shall not relieve the Contractor of any of his duties, obligations or responsibilities under the Contract.

3.4.10 Site Data

The Employer shall have made available to the Contractor for his information, prior to the Base Date, all relevant data in the Employer's possession on subsurface and hydrological conditions at the Site, including environmental aspects.

The Employer shall similarly make available to the Contractor all such data, which come into the Employer's possession after the Base Date. The Contractor shall be responsible for interpreting all such data.

To the extent which was practicable (taking account of cost and time), the Contractor shall be deemed to have obtained all necessary information as to risks, contingencies and other circumstances which may influence the Tender or Works. To the same extent, the Contractor shall be deemed to have inspected and examined the Site, its surroundings, the above data and other available information, and to have been satisfied before submitting the Tender as to all relevant matters, including (without limitation):

- (a) the form and nature of the Site, including sub-surface conditions, the hydrological and climatic conditions
- (b) the extent and nature of the work and Goods necessary for the execution and completion of the Works and the remedying of any defects
- (c) the Laws, procedures and labour practices of the Country' and

- (d) The Contractor's requirements for access, accommodation, facilities, personnel, power, transport, water and other services.

3.4.11 Sufficiency of the Accepted Contract Amount

The Contractor shall be deemed to:

- (a) have satisfied himself as to the correctness and sufficiency of the Accepted Contract Amount
- (b) have based the Accepted Contract Amount on the data, interpretations, necessary information, inspections, examinations and satisfaction as to all relevant matters referred to in Sub-Clause 3.4.10 [Site Data].

Unless otherwise stated in the Contract, the Accepted Contract Amount covers all the Contractor's obligations under the Contract (including those under Provisional Sums; If any) and all things necessary for the proper execution and completion of the works and the remedying of any defects.

3.4.12 Unforeseeable Physical Conditions

In this Sub-Clauses, "physical conditions" means natural physical conditions which the Contractor encounters at the Site when executing the works, including sub-surface and hydrological conditions but excluding climatic conditions.

If the Contractor encounters adverse physical conditions, which he considers to have been Unforeseeable, the Contractor shall give notice to the Engineer within 24 Hrs.

This notice shall describe the physical conditions, so that they can be inspected by the Engineer, and shall set out the reasons why the Contractor considers them to be Unforeseeable. The Contractor shall continue executing the Works, using such proper and reasonable measures as are appropriate for the physical conditions, and shall comply with any instructions, which the Engineer may give. If an instruction constitutes a Variation, Clause 3.12 [Variations and Adjustments] shall apply.

If and to the extent that the Contractor encounters physical conditions which are Unforeseeable, gives such a notice, and suffers delay and/or incurs Cost due to these conditions, the Contractor shall be entitled subject to Sub-Clause 3.19.1 [Contractor's Claims] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under **Sub-Clause 3.7.4 [Extension of Time for Completion]**, and
- (b) payment of any such Cost, which shall be included in the Contract Price.

After receiving such notice and inspecting and/or investigating these physical conditions, the Engineer shall proceed in accordance with Sub-Clause 3.3.4

[Determinations] to agree or determine (i) whether and (if so) to what extent these physical conditions were Unforeseeable, and (ii) the matters described in subparagraphs (a) and (b) above related to this extent.

However, before additional Cost is finally agreed or determined under subparagraph (b), the Engineer may also review whether other physical conditions in similar parts of the Works (if any) were more favorable than could reasonably have been foreseen when the Contractor submitted the Tender. If and to the extent that these more favorable conditions were encountered, the Engineer may proceed in accordance with Sub-Clause 3.3.4 [Determinations] to agree or determine the reductions in Cost which were due to these conditions, which may be included (as deductions) in the Contract Price and Payment Certificates. However, the net effect of all adjustments under sub-paragraph (b) and all these reductions, for all the physical conditions encountered in similar parts of the Works, shall not result in a net reduction in the Contract Price.

The Engineer may take account of any evidence of the physical conditions foreseen by the Contractor when submitting the Tender, which may be made available by the Contractor, but shall not be bound, by any such evidence.

3.4.13 Rights of Way and Facilities

The Contractor shall bear all costs and charges for special and/or temporary rights of-way which he may require, including those for access to the Site. The Contractor shall also obtain, at his risk and cost, any additional facilities outside the Site, which he may require for the purposes of the Works.

3.4.14 Avoidance of Interference

The Contractor shall not interfere unnecessarily or improperly with:

- (a) the convenience of the public, or
- (b) the access to and use and occupation of all roads and footpaths, irrespective of whether they are public or in the possession of the Employer or of others.

The Contractor shall indemnify and hold the Employer harmless against and from all damages, losses and expenses (including legal fees and expenses) resulting from any such unnecessary or improper interference.

3.4.15 Access Route

The Contractor shall be deemed to have been satisfied as to the suitability and availability of access routes to the Site. The Contractor shall use reasonable efforts to prevent any road or bridge from being damaged by the Contractor's traffic or by the Contractor's Personnel. These efforts shall include the proper use of appropriate

vehicles and routes. Except as otherwise stated in these Conditions:

- (a) the Contractor shall be responsible for any maintenance which may be required for his use of access routes;
- (b) the Contractor shall provide all necessary signs or directions along access routes, and shall obtain any permission which may be required from the relevant authorities for his use of route signs and directions;
- (c) the Employer shall not be responsible for any claims which may arise from the use or otherwise of any access route,
- (d) the Employer does not guarantee the suitability or availability of particular access routes, and
- (e) Costs due to non-suitability or non-availability, for the use required by the Contractor, of access routes shall be borne by the Contractor.

3.4.16 Transport of Goods

Unless otherwise stated in the Particular Conditions:

- (a) The contractor shall give the Employer not less than 07 days' notice of the date on which any Plant or a major item of other Goods will be delivered to the Site;
- (b) The Contractor shall be responsible for packing, loading, transporting, receiving, unloading, storing and protecting all Goods and other things required for the Works; and
- (c) The Contractor shall indemnify and hold the Employer harmless against and from all damages, losses and expenses (including legal fees and expenses) resulting from the transport of goods and shall negotiate and shall negotiate and pay all claims arising from their transport.

3.4.17 Contractor's equipment

The Contractor shall be responsible for all Contractor's equipment. When bought on to the Site, Contractor's equipment shall be deemed to be exclusively intended for the execution of the Works and shall be retained at the site till the completion of the work. The Contractor shall not remove from the Site any major items of Contractor's equipment without the consent of the Engineer. However, consent shall not be required for vehicles transporting Goods or Contractor's Personnel off Site.

3.4.18 Environmental Monitoring

Environmental Management Plan (EMP) shall be drawn, as per the MoEF&CC guidelines, by the successful bidder in such a way that all reasonable precautions shall be undertaken so that the dredging operations does not result in any adverse impact on the water quality and marine productivity in the vicinity and submit the same for the prior approval of the Engineer-in-charge. The Environmental Management Plan

shall deal with impacts resulting from the dredging and offshore dumping which concerns sea water pollution and impacts resulting from the drainage of onshore reclamation. The Environmental Management Plan shall reflect the standards for environmental protection specified by the Ministry of Environment and Forest while issuing environmental clearance for the project. Copy of EC shall be handed over to the successful bidder.

It is the responsibility of the contractor to comply with all rules and regulations in connection with the dredging contract in general, complying with EC & CRZ norms. The bidder shall consider all the environmental protection cost along with applicable norms in the relevant quantities of BoQ.

The Environmental Management Plan will also reflect measures to be taken by the successful bidder to mitigate and protect the environment against impacts resulting from the dredging and reclamation and offshore dumping operations.

The general form of the Environmental Protection Plan shall include and not be limited to

- ❖ Objective
- ❖ Work Plan
- ❖ Implementation schedule
- ❖ Man power requirement
- ❖ Monitoring procedure

Note:

The entire dredged spoil under this contract shall be disposed of, into the designated dumping ground (Latitude 22°51' 00" and Longitude 70°10'.00"), so as to avoid movement of the disposed sediments and causing any impact on the shoreline. the Employer/Engineer reserves the right to relocate the above dumping ground to any other location approximately within the distances of 3 Kms of the Southern boundary of the above dumping grounds.

All dredgers and other floating crafts of the contractor shall follow MARPOL regulations.

In addition to various stipulation of this contract documents with regard to dredging, the Contractor shall comply with the specific conditions, other standard conditions and general clauses applicable for dredging as stipulated by MoEF&CC, Environmental and CRZ Clearance dated 20.11.2020 and prepare the EMP and strictly adhere the same during dredging operations.

Environment protection

The Contractor shall take all reasonable steps to protect the environment (both on and off the Site) and to limit damage and nuisance to people and property resulting from pollution, noise and other results of his operations.

The Contractor shall ensure that emissions, surface discharges and effluent from the Contractor's activities shall not exceed the values indicated in the Specification and shall not exceed the values prescribed by applicable Laws.

Dredging works shall be undertaken such a way as to ensure that these operations do not deteriorate the surface water quality. Adequate anti-pollution measures should be taken so that environmental quality is maintained.

Samples of harbour water and sediment to be collected at various points including off shore disposal area at least once in a 15 days and as the case may be and will have to be tested by a laboratory approved by Central/State Pollution Control Boards and test results will have to be submitted to EMPLOYER/ENGINEER for records. The tested sample result should be compared with primary water quality standards framed by Central water pollution Control Board (SW IV waters) and also back ground concentration values for other parameters.

Base Samples shall be collected one week prior to commencement of works

The parameters to be monitored are:

a) For water quality-

Physical properties- pH, EC, colour, odour, salinity, temperature, turbidity and total suspended solids.

Chemical properties- DO, BOD, COD, Oil & Grease, nutrients, sulphates, and chlorides.

Heavy metals: Fe, Zn, Mg, Cd, Cr, Hg

Marine biology: Phytoplankton & Zooplankton

b) For sediment quality-

Physical properties- pH, organic matter, nutrients, oil & grease

Heavy metals: Fe, Mn, Cd, Ni, Cr, Hg, Zn and Pb

Benthic Communities: Macro & Micro Benthic Flora and Fauna.

The Contractor shall observe the conservancy rules relating to the Harbour and shall always take such necessary additional steps to keep the harbour waters free of noxious or unhygienic matters coming from his works as are required by the Employer.

Under no circumstances shall inflammable material and untreated Sewage be allowed to spill to the Harbour area.

The bidders shall ascertain from the public domain including the websites of the concerned departments and understand the probable period of the fish breeding season. The bidder shall also understand that the dredging shall not be allowed to be carried out during the fish-breeding season. The bidder shall plan their activities taking into account the above restrictions imposed by the concerned authorities. Any claim in this regard including idling, mob or demob, on account of the above imposition by the respective state government, shall not be entertained for reasons whatsoever.

Any services rendered by Employer during the execution of contract will be chargeable as per DPA scale of rates.

3.4.19 Site Facilities

Facilities Supplied by the Contractor

The Contractor shall supply all services, amenities, temporary structures including, transport, security fencing and storage compounds, machinery, buildings and construction equipment necessary for the proper execution of the Works at Site at his cost except for the items specified below, which will be provided by the Employer.

Facilities Supplied by the Employer

The Employer will make available to the Contractor the following services which will be charged at the schedule of rates, DEENDAYAL PORT AUTHORITY and notifications thereof from time to time and such services are detailed below;

(a) Berth for Bunkering Maintenance

For the purpose of bunkering, repairs, maintenance, etc. the contractor will be provided necessary anchorage, mooring in Kandla creek or berth will be provided subject to availability. However, when the contractor requires an independent berth for the purpose, berth hire charges as applicable in the Scale of Rates will be charged to the contractor. The contractor shall pay the Port dues and vessel related charges including pilotage for initial entry to Deendayal Port and departure after completion and all other dues will be exempted during the period of the contract.

(b) Electric Power

The Contractor shall make its own arrangements for all electrical supply for lighting, marking, etc. and for power supply for all its floating plant and craft and shall bear all costs for the same.

(c) Accommodation

Contractor will not be permitted to establish its labour camp and residential accommodation for its staff on Employer's land unless given specifically for the purpose. Necessary accommodation shall be provided as per availability and on payment of necessary charges prevailing from time to time.

(d) Harbour facilities as per availability will be provided to the contractor as per the rates given in the Deendayal Port Scale of Rates and notification thereof from time to time.

3.4.20 Progress Reports

Unless otherwise stated, daily progress reports shall, be prepared by the Contractor and submitted to the Engineer in six copies. The first monthly report shall cover the period up to the end of the first calendar month following the Commencement Date. Reports shall be submitted monthly thereafter, each within 7 days after the last day of the period to which it relates.

Reporting shall continue until the Contractor has completed all work, which is known to be outstanding at the completion date, stated in the Taking-Over Certificate for the Works.

Each report shall include:

- (a) charts and detailed descriptions of progress, including each stage of design (if any), Contractor's Documents, procurement, manufacture, delivery to Site, construction, erection and testing; and including these stages for work by each Subcontractor,
- (b) the detail's described in Sub-Clause 3.5.10 [Records of Contractor's Personnel and Equipment];
- (c) copies of quality assurance documents, test results and certificates of Materials;
- (d) list of notices given under Sub-Clause 3.2.4 [Employer's Claims] and notices given under Sub-Clause 3.19.1 [Contractor's Claims];

(e) safety statistics, including details of any hazardous incidents and activities relating to environmental aspects and public relations; and

(f) Comparisons of actual and planned progress, with details of any events or circumstances which may jeopardize the completion in accordance with the Contract, and the measures being (or to be) adopted to overcome delay.

3.4.21 Security of the Site

Unless otherwise stated:

the Contractor shall be responsible for keeping unauthorised persons off the Site/ Dredgers and the other floating crafts, and authorised persons shall be limited to the Contractor's Personnel and the Employer's Personnel; and to any other personnel notified to the Contractor, by the Employer or the Engineer, as authorised personnel of the Employer's other contractors on the Site/Dredgers an' other floating crafts.

3.4.22 Contractor's Operations on Site

The Contractor shall confine his operations to the Site, and to any additional areas, which may be obtained by the Contractor and agreed by the Engineer as working areas. The Contractor shall take all necessary precautions to keep Contractor's Equipment and Contractor's Personnel within the site and these additional areas, and to keep them off adjacent areas.

During the execution of the Works, the Contractor shall keep the Site free from all unnecessary obstruction, an' shall store or dispose of any Contractor's Equipment or surplus materials. The Contractor shall clear away and remove from the Site any wreckage, rubbish and Temporary Works, which are no longer, required.

Upon the issue of a Taking-Over Certificate, the Contractor shall clear away and remove, from that part of the Site and Works to which the Taking-Over Certificate refers, all Contractor's Equipment, surplus material, wreckage, rubbish and Temporary Works. The Contractor shall leave that part of the Site and the Works in a clean and safe condition. However, the Contractor may retain on Site, during the Defects Notification Period, such Goods as are required for the Contractor to fulfil obligations under the Contract.

3.4.23 Fossils

All fossils, coins, articles of value or antiquity, and structures and other remains or items of geological or archaeological interest found on the Site shall be placed under the care and authority of the Employer. The Contractor shall take reasonable

precautions to prevent Contractor's Personnel from removing or damaging any of these findings.

The Contractor shall, upon discovery of any such finding, promptly give notice to the Engineer, who shall issue instructions for dealing with it. If the Contractor suffers delay and/or incurs cost from complying with the instructions, the Contractor shall give a further notice to the Engineer and shall be entitled subject to Sub-Clause 3.19.1 [Contractor's Claims] to:

(a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 3.7.4 [Extension of Time for Completion], and

(b) Payment of any such Cost, which shall be included in the Contract Price. After receiving this further notice, the Engineer shall proceed in accordance with Sub-Clause 3.3.4 [Determinations] to agree or determine these matters.

3.5 STAFF AND LABOUR

3.5.1 Engagement of Staff and Labour

Except as otherwise stated in the Specification, the Contractor shall make arrangements for the engagement of all staff and labour, local or otherwise, and for their payment, housing, feeding and transport.

3.5.2 Rates of Wages and Conditions Labour

The Contractor shall pay rates of wages, and observe conditions of labour, which are not lower than those established for the of trade or industry where the work is carried out. If no Established rates or conditions are applicable, the Contractor shall pay rates of wages and Observe conditions, which are not lower than the general level of wages, and conditions Observed locally by employers whose trade or industry is similar to that of the Contractor.

3.5.3 Persons in the Service of Employer

The Contractor shall not recruit, or attempt to recruit, staff and labour from amongst the Employer's Personnel.

3.5.4 Labour Laws

The Contractor shall comply with all the relevant labour Laws applicable to the Contractor's Personnel, including Laws relating to their employment, health, safety, welfare, immigration and emigration, and shall allow them all their legal rights.

The Contractor shall require his employees to obey all applicable Laws, including those concerning safety at work.

3.5.5 Working Hours

Dredging operation shall be carried out round the clock.

3.5.6 Facilities for Staff and Labour

Except as otherwise stated in the Specification, the Contractor shall provide and maintain all necessary accommodation and welfare facilities for the Contractor's Personnel. The Contractor shall also provide facilities for the Employer's Personnel as stated in the Specification.

The Contractor shall not permit any of the Contractor's Personnel to maintain any temporary or permanent living quarters within the structures forming part of the Permanent Works.

3.5.7 Health and Safety

The Contractor shall at all times take all reasonable precautions to maintain the health and safety of the Contractor's Personnel. In collaboration with local health authorities, the Contractor shall ensure that medical staff, first aid facilities, sick bay and ambulance service are available at all times at the Site and at any accommodation for Contractor's and Employer's Personnel, and that suitable arrangements are made for all necessary welfare and hygiene requirements and for the prevention of epidemics. The Contractor shall appoint a Health, Safety and Environment officer at the Site, responsible for maintaining safety and protection against accidents. This person shall be qualified for this responsibility and shall have the authority to issue instructions and take protective measures to prevent accidents. Throughout the execution of the Works, the Contractor shall provide whatever is required by this person to exercise this responsibility and authority.

The Contractor shall send, to the Engineer, details of any accident as soon as as practicable after its occurrence. The Contractor shall maintain records and make Reports concerning health, safety and welfare of persons, and damage to property, as, the Engineer may reasonably require.

3.5.8 Contractor's Superintendence

(i) Throughout the execution of the Works, and as long thereafter, as is necessary to fulfill the Contractor's obligations, the Contractor shall provide all Necessary superintendence to plan, arrange, direct, manage, inspect and test the work. Superintendence shall be given by a sufficient number of persons having adequate knowledge of the language for communications (defined in Sub- Clause 3.1.4 [Law and Language]) and of the operations to be carried out (including the methods and techniques required, the hazards likely to be encountered and methods of preventing accidents), for the satisfactory and safe execution of the Works.

A reasonable proportion of the Contractor's Superintending staff shall have a working knowledge of English or the Contractor shall have a sufficient number of competent interpreters available during all working hours.

(ii) Foreign Staff and Labour:

The Contractor may import any personnel who are necessary for the execution of the works. The Contractor must ensure that these personnel are provided with the required residence visas and work permits. The Contractor shall be responsible for the return to the place where they were recruited or to their domicile of imported Contractor's personnel. In the event of the death in the Country of any of these personnel or members of their families, the Contractor shall similarly be responsible for making the appropriate arrangements for their return or burial.

(iii) Measures against Insect and Pest Nuisances:

The Contractor shall at all time take necessary precautions to protect all staff and all labour employed on the site from insect and pest nuisance, and to reduce their danger to Contractor's personnel. The Contractor shall provide suitable prophylactics for the Contractor's personnel and shall comply with all the regulations of the local health authorities, including use of appropriate insecticide.

(iv) Alcoholic Liquor or Drugs:

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

(v) Arms and Ammunition:

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

(vi) Festivals and Religious Customs:

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

3.5.9 Contractor's Personnel

The Contractor's Personnel shall be appropriately qualified, skilled and experienced in their respective trades or occupations. The Engineer may require the Contractor to remove (or cause to be removed) any person employed on the Site or Works, including the Contractor's Representative if applicable, who:

- (a) persists in any misconduct or lack of care,
- (b) carries its duties incompetently or negligently,
- (c) fails to conform with any provisions of the Contract, or
- (d) persists in any conduct, which is prejudicial to safety, health, or the protection of the environment.

If appropriate, the Contractor shall then appoint (or cause to be appointed) a suitable replacement person.

3.5.10 Records of Contractor's Personnel and Equipment

The Contractor shall submit, to the Engineer, details showing the number of each class of Contractor's Personnel and of each type of Contractor's Equipment on the Site. Details shall be submitted each calendar month, in a form approved by the Engineer, until the Contractor has completed all work, which is known to be outstanding at the completion date, stated in the Taking- Over Certificate for the Works.

3.5.11 Disorderly Conduct

The Contractor shall at all times take all reasonable precautions to prevent any unlawful, riotous or disorderly conduct by or amongst the Contractor's Personnel, and to preserve peace and protection of persons and property on and near the Site.

3.6 PLANT, MATERIALS AND WORKMANSHIP

3.6.1 Manner of Execution

The Contractor shall carry out all other execution of the Works:

- (a) in the manner (if any) specified in the Contract,
- (b) in a proper workmanlike and careful manner, in accordance with recognized good practice, and
- (c) with properly equipped facilities and non-hazardous Materials, except as

otherwise specified in the Contract.

3.6.2 To 3.6.6 deleted

3.6.7 Ownership of Plant and Materials

Each item of Plant and Materials shall, to the extent consistent with the Laws of the Country, become the property of the Employer at whichever is the earlier of the following times, free from liens and other encumbrances:

- (a) when it is delivered to the Site;
- (b) The Contractor is not entitled to payment of the value of the Plant and Materials.

3.6.8 Royalties

No royalty shall be paid/ charged to the contractor for disposal of dredged material at the dumping ground.

3.7 COMMENCEMENT, DELAYS AND SUSPENSION

3.7.1 Commencement of Work

The Engineer shall give the Contractor not less than 7 days' notice of the Commencement date. Unless otherwise stated, the Commencement date shall be within 30 days after the Contractor receives the Letter of Acceptance.

3.7.2 Time of Completion, Compensation for Delay to Contractor's Negligence

The Contractor shall complete the whole of the work within the Time for Completion for the Works or Section (as the case may be):

- (a) achieving the passing of the Tests on Completion, and
- (b) completing all work, which is stated in the Contract as being required for the works or Section to be considered to be completed for the purposes of taking over.
- (c) Time period for completion of work
 - i. Capital Dredging in the Access Channel and in the approach from the jetty up to Access Channel of OJ 9 (item no. 7 of BoQ) – 6 months from the date of commencement of the work or in the event of specific instruction from the employer, 6 months from the date of such instruction to commence the work in this location, whichever is later.
 - ii. Dredging the Navigational Channel of Kandla Port between Buoy No. 2 to 1 (Zone IB) (item no. 8 of BoQ) – the work shall be commenced in this location after the expiry of 6 months from the date of commencement of the contract and shall be completed within 6 months

thereafter viz., the work shall be carried out in the period between 7th to 12th month from the date of commencement of contract.

- iii. Maintenance dredging vide item nos. 1,2,4,5 & 6 of BoQ shall be carried out for 36 months from the date of commencement of the contract.
- iv. Maintenance dredging work in the navigational channel Zone IA (item no. 3 of BOQ) shall be carried out for initial 12 months from the date of commencement of the contract.
- v. Maintenance dredging work in navigational channel zone IB shall commence from the date of completion of the dredging in this area and taking over and this item will be integrated with the maintenance dredging of navigational channel Zone IA (item no. 9 of BOQ) and continued for a period of 24 months thereafter.

Note: In the event of the dredging Zone IB is delayed or taken over in advance from the period mentioned in item no. ii above, the period mentioned in item no. iv & v above, shall be varied accordingly.

- vi. However, the maintenance dredging work in Zone-IA (Buoy No. 2 to 4), Zone IB (buoy no. 1 to 2) Zone I (Buoy no 4 to 8) & Zone-II (Buoy no 8 to 12) of Navigational channel may be extended, if found necessary, at the sole discretion of the employer for a further period upto 3 months under the same terms and conditions. In case the contract is extended for a period up to 3 months beyond the 36 months of completion period, payments will be made at the rate quoted by the contractor for item no 1, 2 & 9 of Bill of Quantity for maintaining the depths in Zone-II (Buoy no 8 to 12), Zone- I (Buoy No. 4 to 8) & Zone IA (Buoy no 2 to 4) & Zone IB (buoy no. 1 to 2) which are available in the channel at the end of 36th month from the date of commencement of the contract. However, the compensation for not maintaining the depth/width during the extended period will be applicable as per tender conditions.
- (d) In the event of the contractor failing to complete the work in all respects within the time specified or within the extended time that may be allowed by the Engineer as per the terms of the contract, hereof the contractor shall pay or allow the Board to recover a sum equal to 0.5% per week or part thereof of the total value of capital dredging component of the contract subject to maximum of 10% of the contract value of capital dredging component as liquidated damages. (for Capital dredging Item No.07 & 08 of BoQ)
- (e) In case part / portions of the work can be commissioned and port operates the portion for commercial purposes, the rate of LD will be restricted to the uncompleted/ undelivered value of work, the maximum LD being on the entire contract value.

(Note; For maintenance dredging item no.1,2,3 & 9, there is separate penalty provision for recovery as per clause no.6.23.6)

3.7.3 Program

The Contractor shall submit a detailed time programme to the Employer immediately after receiving the notice for proceeding the work. The Contractor shall also submit a revised programme whenever the previous programme is inconsistent with actual progress or with the Contractor's obligations. Each programme shall include:

- (a) the order in which the (Contractor intends to carry out the Works, including the anticipated timing of each stage of location of work and Contractor's Documents etc.,
- (b) the sequence and timing of completion of dredging areas.
- (c) a supporting report which includes:
 - (i) a general description of the methods which the Contractor intends to adopt; and of the major stages, in the execution of the Works, and
 - (ii) details showing the Contractor's reasonable estimate of the number of each class of Contractor's Personnel and of each type of Contractor's Equipment required on the Site for each major stage.

Unless the Employer, within 21 days after receiving a programme, gives notice to the Contractor stating the extent to which it does not comply with the Contract, the Contractor shall proceed in accordance with the programme, subject to his obligations under the Contract. The Employer's Personnel shall be entitled to rely upon the programme when planning their activities.

The Contractor shall promptly give notice to the Employer of specific probable future events or circumstances, which may adversely affect the work, increase the Contract Price or delay the execution of the Works. The Employer may require the Contractor to submit an estimate of the anticipated effect of the future event or circumstances.

If, at any time, the Employer gives notice to the Contractor that a programme fails (to the extent stated) to comply with the Contract or to be consistent with actual progress and the Contractor's stated intentions, the Contractor shall submit a revised programme to the Employer.

3.7.4 Extension of Time for Completion

The Contractor shall be entitled subject to an extension of the Time for Completion if and to the extent that completion for the purposes or will be delayed by any of the following causes:

- (a) a Variation Procedure or other substantial change in the quantity of an item of work included in the Contract,
- (b) a cause of delay giving an entitlement to extension of time under a Sub- Clause of these Conditions,
- (c) exceptionally adverse climatic conditions,
- (d) Unforeseeable shortages in the availability of personnel or Goods caused by

epidemic or governmental actions, or
(e) Any delay, impediment or prevention caused by or attributable to the Employer, the Employer's Personnel, or the Employer's other contractors on the Site.

If the Contractor considers himself to be entitled to an extension of the Time for Completion, the Contractor shall give notice to the Employer. When determining each extension of time under the Employer shall review previous determinations and may increase, but shall not decrease, the total extension of time. Further, extension of contract period shall be decided by the Employer as per tender condition.

3.7.5 Delays caused by Authorities

If the following conditions apply, namely:

- (a) The Contractor has diligently followed the procedures laid down by the relevant legally constituted public authorities in the Country,
- (b) These authorities delay or disrupt the Contractor's work, and
- (c) The delay or disruption was Unforeseeable, then this delay or disruption will be considered as a cause of delay under subparagraph.

3.7.6 Rate of Progress

If, at any time, actual progress is too slow to complete within the Time for Completion, other than as a result of a cause listed in Sub- Clause **3.21.4** [Extension of Time for Completion], then the Engineer may instruct the Contractor to submit, under Sub- Clause **3.21.3** [Programme], a revised programme and supporting report describing the revised methods which the Contractor proposes to adopt in order to expedite progress and complete within the Time for Completion.

Unless the Engineer notifies otherwise, the Contractor shall adopt these revised methods, which may require increases in the working hours and/or in the numbers of Contractor's Personnel and/or Goods, at the risk and cost of the Contractor. If these revised methods cause the Employer to incur additional costs, the Contractor shall pay these costs to the Employer based on the determination of the Engineer.

3.7.7 Contractor's responsibility

Notwithstanding the payment of liquidated damages if any, this shall not relieve the contractor from his obligation to complete the work or from any other obligations /liabilities under this contract.

3.7.8 Suspension of Work

The Engineer may at any time instruct the Contractor to suspend progress of part or all of the Works. The Engineer may also notify the cause for the suspension. If and to the extent that the cause is notified and is the responsibility of the Contractor, the

following Sub Clauses **3.21.9, 3.21.10 and 3.21.11** shall not apply.

3.7.9 Consequences of Suspension

If the Contractor suffers delay and/or incurs Cost from complying with the engineer's instructions under Sub-Clause **3.21.8** [Suspension of Work] and/or from resuming the work, the Contractor shall give notice to the Employer and shall be entitled subject to Sub-Clause **3.33.1** [Contractor's Claims] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause **3.21.4** [Extension of Time for Completion], and
- (b) Payment of any such Cost, which shall be included in the Contract Price. After receiving this notice, the Employer shall proceed in accordance with Sub Clause **3.17.4** [Determinations] to agree or determine these matters.

3.8 Tests on Completion – Deleted.

3.9 Employer's taking Over

3.9.1 Taking over of the Works and Sections

The Works shall be taken over by the Employer when (i) the Works have been completed in accordance with the Contract, including the matters described in Sub-Clause 7.2 [Time for Completion] and except as allowed in sub-paragraph (a), below, and (ii) a Taking-Over Certificate for the Works has been issued, or is deemed to have been issued in accordance with this Sub-Clause.

The Contractor may apply by notice to the Engineer for a Taking-Over Certificate not earlier- than 14 days before the Works will, in the Contractor's opinion, be complete and ready for taking over. If the Works is divided into Sections, the Contractor may similarly apply for a Taking-Over Certificate for each Section.

The Engineer shall, within 28 days after receiving the Contractor's application:

- (a) issue the Taking-Over Certificate to the Contractor, stating the date on which the Works or Section were completed in accordance with the Contract, except for any minor outstanding work and defects which will not substantially affect the use of the Works or Section for their intended purpose (either until or whilst this work is completed and these defects are remedied);

- (b) reject the application, giving reasons and specifying the work required to be done by the Contractor to enable the Taking-Over Certificate to be issued. The Contractor shall then complete this work before issuing a further notice under this Sub-Clause.

If the Engineer fails either to issue the Taking-Over Certificate or to reject the Contractor's application within the period of 28 days, and if the Works or Section (as the case may be) are substantially in accordance with the Contract, the Taking Over

Certificate shall be deemed to have been issued on the last day of that period.

3.9.2 Taking Over of a Parts of the Works

The Engineer may, at the sole discretion of the Employer, issue a Taking-Over Certificate for any part of the Permanent Works.

The Employer shall not use any part of the Works (other than as a temporary measure which is either specified in the Contract or agreed by both Parties) unless and until the Engineer has issued a Taking-Over Certificate for this part. However, if the Employer does use any part of the Works before the Taking-Over Certificate is issued:

- (a) the part which is used shall be deemed to have been taken over as from the date on which it is used,
- (b) the Contractor shall cease to be liable for the care of such part as from this date, when responsibility shall pass to the Employer, and
- (c) if requested by the Contractor, the Engineer shall issue a Taking-Over Certificate for this part.

After the Engineer has issued a Taking-Over Certificate for a part of the Works, the Contractor shall be given the earliest opportunity to take such steps as may be necessary to carry out any outstanding Tests on Completion. The Contractor shall carry out these Tests on Completion as soon as practicable before the expiry' date of the relevant Defects Notification Period.

If the Contractor incurs Cost as a result of the Employer taking over and/or using a part of the 'Works, other than such use as is specified in the Contract or agreed by the Contractor, the Contractor shall (i) give notice to the Engineer and (ii) be entitled subject to Sub-Clause 19.1 [Contractor's Claims] to payment of any such Cost plus reasonable profit, which shall be included in the Contract Price. After receiving this notice, the Engineer shall proceed in accordance with Sub-Clause 3.4 [Determinations] to agree or determine this Cost and profit.

In case part/portions of work can be commissioned and port operates the portion for commercial purposes, the rates of Liquidated Damage will be restricted to uncompleted / undelivered value of work beyond the stipulated date of completion. The defects notification period for the portions taken over in sections shall be as indicated in the appendix to tender.

3.9.3 Interference with Tests on Completion - Deleted –

3.9.4 Surfaces Requiring Reinstatement - Deleted

3.10 Defects Liability

3.10.1 Completion of Outstanding Work and Remedying Defects

In order that the works in Contract documents and each Section shall be in the condition required by the Contract (fair wear and tear accepted) by the expiry date of the relevant Defects Notification Period given in the appendix to tender or as soon as practicable thereafter, the Contractor shall:

- (d) complete any work which is outstanding on the date stated in a Taking-Over Certificate, within such reasonable time as is instructed by the Engineer, and
- (e) execute all work required to remedy defects or damage, as may be notified by (or on behalf of the Employer on or before the expiry date of the Defects Notification Period for the Works or Section (as the case may be).

There is no defect liability for dredging work. However, the component of work relating to the shore protection shall meet the relevant provisions of the clause. If a defect appears or damage occurs, the Contractor shall be notified accordingly, by (or on behalf of) the Employer.

3.10.2 to 3.10.6 -- Deleted

3.10.7 Right of Access

Until the Performance Certificate has been issued, the Contractor shall have such right of access to the Works as is reasonably required in order to comply with this Clause, except as may be inconsistent with the Employers reasonable security restrictions.

3.10.8- Deleted-

3.10.9- Performance Certificate

Performance of the Contractor's obligations shall not be considered to have been completed until the Engineer has issued the Performance Certificate to the Contractor, stating the date on which the Contractor completed his obligations under the Contract.

Only the Performance Certificate shall be deemed to constitute acceptance of the Works. A Performance Certificate will be issued to the contractor after successful completion of the work.

3.10.10 Unfulfilled Obligations

After the Performance Certificate has been issued, each Party shall remain liable for the fulfillment of any obligation, which remains unperformed at that time. For the purposes of determining the nature and extent of unperformed obligations, the Contract shall be deemed to remain in force.

3.10.11 Clearance of Site

Upon receiving the Performance Certificate, the Contractor shall remove any remaining Contractor's Equipment, surplus material, wreckage, rubbish and Temporary Works from the Site.

If all these items have not been removed within 28 days after the Contractor receives a copy of the Performance Certificate, the Employer may sell or otherwise dispose of any remaining items. The Employer shall be entitled to be paid the costs incurred in connection with, or attributable to, such sale or disposal and restoring the Site.

Any balance of the moneys from the sale shall be paid to the Contractor. If these moneys are less than the Employer's costs, the Contractor shall pay the outstanding balance to the Employer.

3.11 MEASUREMENT AND EVALUATION (ALSO REFER TO TECHNICAL SPECIFICATIONS)

3.11.1 Works to be measured

The Works shall be measured, and valued for payment, in accordance with this Clause. Whenever the Employer requires any part of the Works to be measured, reasonable notice shall be given to the Contractor's Representative, who shall:

- (a) promptly either attend or send another qualified representative to assist the Employer in making the measurement, and
- (b) supply any particulars requested by the Employer.

If the Contractor fails to attend or send a representative, the measurement made by (or on behalf of) the Employer shall be accepted as accurate.

The Contractor shall, as and when requested, attend to examine and agree the records with the Employer, and shall sign the same when agreed. If the Contractor does not attend, the records shall be accepted as accurate.

If the Contractor examines and disagrees the records, and/or does not sign them as agreed, then the Contractor shall give notice to the Employer of the respects in which the records are asserted to be inaccurate. After receiving this notice, the Employer shall review the records and either confirm or vary them. If the Contractor does not so give notice to the Employer within 14 days after being requested to examine the records, they shall be accepted as accurate.

3.11.2 Method of Measurement

Except as otherwise stated in the Contract and notwithstanding local practice:

- (a) measurement shall be made on joint Quadruplicate Bathymetry survey to arrive their-in-situ quantity basis dredged quantity.
- (b) the method of measurement shall be in accordance with the Bill of Quantities or other applicable Schedules.

3.11.3 Evaluation

Except as otherwise stated in the Contract, ENGINEER / EMPLOYER shall proceed to

agree or determine the Contract Price by evaluating each item of work, applying the measurement agreed or determined in accordance with the appropriate rate or price for the item.

For each item of work, the appropriate rate or price for the item shall be the rate or price specified for such item in the Contract or, if there is no such item, specified for similar work. However, a new rate or price shall be appropriate for an item of work if:

- (a) No specified rate or price is appropriate because the item of work is not of similar character, or is not executed under similar conditions, as any item in the Contract.
- (b) Each new rate or price shall be derived from any relevant rates or prices in the Contract, with reasonable adjustments to take account of the matters described. If no rates or prices are relevant for the derivation of a new rate or price, it shall be derived from the reasonable cost of executing the work, together with reasonable profit, taking account of any other relevant matters.
- (c) Until such time as an appropriate rate or price is agreed or determined, ENGINEER / EMPLOYER shall determine a provisional rate or price for the purposes of Interim Payment Certificates

3.11.4 Omissions

Whenever the omission of any work forms part (or all) of a Variation, the value of which has not been agreed, if:

- (a) the Contractor will incur (or has incurred) cost which, if the work had not been omitted, would have been deemed to be covered by a sum forming part of the Contract price;
- (b) the omission of the work will result (or has resulted) in this sum not forming part of the Contract Price; and
- (c) This cost is not deemed to be included in the evaluation of any substituted work; then the Contractor shall give notice to ENGINEER / EMPLOYER accordingly, with supporting particulars. Upon receiving this notice, ENGINEER / EMPLOYER shall to agree or determine this cost, which shall be included in the Contract Price.

3.12 VARIATIONS AND ADJUSTMENTS

3.12.1 Right to Vary

The Employer shall make any variation in the quantity of the works or any part thereof that may, in his opinion, be necessary and for that purpose, or if for any other reason it shall, in his opinion, be appropriate, he shall have the authority to instruct the contractor to do and the contractor shall do any of the following.

- (a) Increase or decrease the quantity up to **+/- 30%**.
- (b) Omit any such work (partially or fully).
- (c) Change the character or quality or kind of any such work.

- (d) Change the levels, lines, position and dimension of any part of the work.
- (e) Execute additional work of any kind necessary for the completion of the work
- (f) Change any specified sequence or timing of dredging of any part of the works.

(g) **The quantity in BOQ is for estimation only. However, actual quantity for dredging will be decided as pre-joint quadruplicate joint Quadruplicate Bathymetry survey.**

No such variation shall in any way vitiate or invalidate the contract, but the effect, if any, of all such variations shall be valued in accordance with **clause-3.12.2** paid to the Contractor, provided that where the issue of an instruction to vary the works is necessitated by some default of or breach of contract by the contractor or for which he is responsible, any additional cost attributable to such default shall be borne by the contractor

The contractor shall not make any variation without an instruction of the Employer. Provided that no instruction shall be required for increase or decrease in the quantity of any work where such increase or decrease is not the result of an instruction given under this clause but is the result of the quantities exceeding or being less than those stated in the **Bill of Quantities**.

3.12.2 Valuation procedure

All variations referred to in 3.12.1 shall be valued in the following manner: -

- (a) at the rates and prices set out in the contract if, in the opinion of the Employer, the same shall be applicable.
- (b) If the contract does not contain any rates or prices applicable to the varied work, the rates and prices in the contract shall be used as the basis for valuation so far as may be reasonable failing which after due consultation by the Employer with the contractor, suitable rates or prices shall be agreed upon between the Employer and the contractor.
- (c) In the event of disagreement, the Employer shall fix such rates or prices as are, in his opinion, appropriate and shall notify the contractor accordingly.

Until such time as rates or prices are agreed or fixed, the Employer shall determine provisional rates or prices to enable on-account payments to be included in certificates issued in accordance with contract price and payment.

3.12.3 Price adjustment

The fuel escalation charges shall be paid to the contractor based on the following formula.

If the price of **main fuel** by the dredger required for execution of the work increases, the contractor shall be compensated for such increase as per provisions detailed below and the amount of the Contract shall accordingly be varied, subject

to the condition that such compensation for escalation in prices shall be available only for the work done during stipulated period of the contract including such period for which the contract validly is extended. Such compensation for escalation in prices.

The contract price will be subjected to adjustment on account of variation of price of diesel according to the formula below: -

$$V = \frac{0.85 \times Q \times R (P - P_o)}{P_o}$$

V= Variation in price on account of **main fuel** during the month under consideration.

P_o = Actual price of **main fuel** fixed by the IOCL in the concerned area / Port, on the date of opening of **Technical bids**.

P = Average price of **main fuel** fixed by the IOCL in the concerned area / Port, for the month under consideration.

Q = Fuel element factor has been predetermined as 0.25

R = Value of the work during the month under consideration as per relevant item of Bill of Quantities excluding mobilization and de-mobilizations fees.

Similarly, if the price of **main fuel** by the dredger required for execution of the work decreases; de-escalation shall be applied for such decrease as per provisions detailed above and the amount of the Contract shall accordingly be adjusted through deduction. Thus, the benefit of reduction in fuel price, if any, shall be passed to the Employer.

The fuel escalation / de-escalation bills will be paid/ recovered on monthly basis as per claim preferred by the contractor. The claim for the month will be submitted latest by 20th day of subsequent month failing which applicable interest will be charged in the case of de-escalation.

Base Rate of Fuel and Adjustment for subsequent Price Variation:

(i) Whenever there is variation in the price of **main fuel**, the Contractor shall forthwith in writing and in any event not later than 7 days from the date of such variation inform the Engineer about such variation to enable the Engineer to verify the same.

(ii) The variation in prices of main fuel to be considered for payment as aforesaid

shall be the price charged by M/s. IOCL/HPCL/BPCL/RIL from time to time at their local delivery point at Deendayal Port at Kandla.

(iii) Compensation for price variation in main fuel shall be worked out and paid/adjusted as the case maybe, subject to the condition that Contractor shall be entitled to such variation in prices only during the Contract Period or any extension thereof not exceeding 3 (three) months as provided in the Contract.

(iv) No escalation other than the price adjustment provided under cl. I to iii above shall be payable by the Employer for reasons whatsoever, and the quoted rate is deemed to cover these aspects also. Beyond the contract period and during extended completion period, the price adjustment payment shall be made at the frozen price index prevailing on the original schedule date of completion of work.

3.12.4 Payment in Applicable Currencies

All the payments under this contract shall be made in the currency indicated in the Appendix to tender.

3.12.5 Provisional Sums

Each Provisional Sum shall only be used, in whole or in part, in accordance with the Engineer's instructions, and the Contract Price shall be adjusted accordingly.

The total sum paid to the Contractor shall include only such amounts, for the work, supplies or services to which the Provisional Sum relates, as the Engineer shall have instructed. For each Provisional Sum, the Engineer may instruct:

(a) work to be executed (including Plant, Materials or services to be supplied) by the Contractor and valued under **Clause 3.12** [*Variation Procedure*]; and/or

(b) Plant, Materials or services to be purchased by the Contractor, and for which there shall be included in the Contract Price:

(i) the actual amounts paid (or due to be paid) by the Contractor, and

(ii) a sum for overhead charges and profit, calculated as a percentage of these actual amounts by applying the relevant percentage rate (if any) stated in the appropriate Schedule. If there is no such rate, the percentage rate stated in the Appendix to Tender shall be applied.

The Contractor shall; when required by the Engineer, produce quotations, invoices,

vouchers and accounts or receipts in substantiation.

3.12.6 Adjustments for Changes in Legislation

The Contract Price shall be adjusted to take account of any increase or decrease in Cost resulting from a change in the Laws of the Country (including the introduction of new Laws and the repeal or modification of existing Laws) or in the judicial or official governmental interpretation of such Laws, made after the Base Date, which affect the Contractor in the performance of obligations under the Contract.

If the Contractor suffers (or will suffer) delay and/or incurs (or will incur) additional Cost as a result of these changes in the Laws or in such interpretations, made after the Base Date, the Contractor shall give notice to the Engineer and shall be entitled subject to **Sub-Clause 3.19.1** [*Contractor's Claims*] to:

(a) an extension of time for any such delay, if completion is or will be delayed, under **Sub-Clause 3.7.4** [Extension of Time for Completion], and

(b) payment of any such Cost, which shall be included in the Contract Price.

After receiving this notice, the Engineer shall proceed in accordance with **Sub Clause 3.3.4** [*Determinations*] to agree or determine these matters.

3.13 CONTRACT PRICE AND PAYMENT

3.13.1 The Contract Price

(a) the Contract Price shall be agreed and be subject to adjustments in accordance with the Contract;

(b) the Contractor shall pay all taxes, duties and fees required to be paid by him under the Contract, and the Contract Price shall not be adjusted for any of these costs except as stated in **Sub Clause 3.12.6** [*Adjustments for Changes in Legislation*]. GST will be reimbursed as stated in clause 3.28(i).

(c) any quantities which may be set out in the Bill of Quantities or other Schedule are estimated quantities and are not to be taken as the actual and correct quantities:

(i) of the Works which the Contractor is required to execute, or

(ii) for the purposes of **Clause 3.11** [*Measurement and Evaluation*];

3.13.2 Advance Payment

The Employer shall not make any advance payment for mobilizations of equipment

or for any reason whatsoever.

3.13.3 Application for Interim Payment Certificates

The Contractor shall submit a Statement in four copies to the Engineer after the end of each month, in a form approved by the Engineer, showing in detail the amounts to which the Contractor considers himself to be entitled, together with supporting documents which shall include the report on the progress during this month in accordance with **Sub-Clause 3.4.20** [*Progress Reports*].

The Statement shall include the following items, as applicable, which shall be expressed in the various currencies in which the Contract Price is payable, in the sequence listed:

- (a) the contract value of the Works executed, and the Contractor's Documents produced up to the end of the month (including variations but excluding items described in sub-paragraphs (b) to (f) below);
- (b) any amounts to be added and deducted for changes in legislation and changes in cost, in accordance with **Sub-Clause 3.12.6** [*Adjustments for Changes in Legislation*] and **Clause 3.12.3** [*Price adjustment*]
- (c) any amount to be deducted for retention, calculated by applying the percentage of retention stated in the Appendix to Tender to the total of the above amounts;
- (d) any amounts to be deducted towards repayments of advances in accordance with **Sub-Clause 3.13.2** [*Advance Payment*];
- (e) any other additions or deductions which may have become due under the Contract or otherwise, including those under **Clause 3.19** [*Claims, Disputes and Arbitration*]; and
- (f) the deduction of amounts certified in all previous Payment Certificates.

3.13.4 Schedule of Payments

- (a) the installments quoted in this schedule of payments shall be the estimated contract values for the purposes of sub-paragraph (a) of **Sub-Clause 3.13.3** [*Application for Interim Payment Certificates*];
- (b) if these installments are not defined by reference to the actual progress achieved in executing the Works, and if actual progress is found to be less than that on which this schedule of payments was based, then the Engineer may

proceed in accordance with **Sub-Clause 3.3.4 [Determinations]** to agree or determine revised installments, which shall take account of the extent to which progress is less than that on which the installments were previously based.

3.13.5 Issue of Interim Payment Certificates

No amount will be certified or paid until the Employer has received and approved the Performance Security. Thereafter, the Engineer shall, within 15 days after receiving a Statement and supporting documents, issue to the Employer an Interim Payment Certificate, which shall state the amount, which the Engineer fairly determines to be due, with supporting particulars.

However, prior to issuing the Taking-Over Certificate for the Works, the Engineer shall not be bound to issue an Interim Payment Certificate in an amount which would (after retention and other deductions) be less than the minimum amount of interim Payment Certificates (if any) stated in the Appendix to Tender. In this event, the Engineer shall give notice to the Contractor accordingly.

An Interim Payment Certificate shall not be withheld for any other reason, although:

(a) if anything supplied or work done by the Contractor is not in accordance with the Contract, the cost of rectification or replacement may be withheld until rectification or replacement has been completed; and/or

(b) if the Contractor was or is falling to perform any work or obligation in accordance with the Contract, and had been so notified by the Engineer, the value of this work or obligation may be withheld until the work or obligation has been performed.

The Engineer may in any Payment Certificate make any correction or modification that should properly be made to any previous Payment Certificate. A Payment Certificate shall not be deemed to indicate the Engineer's acceptance, approval, consent or satisfaction.

3.13.6 Payment

The Employer shall pay to the Contractor:

(a) The amount certified in each Interim Payment Certificate within 28 days after the Engineer receives the Statement and supporting documents. However, 75% of the invoice amount shall be paid within 14 days on submission certification / invoice and balance within 28 days on full verification.

(b) The amount certified in the Final Payment Certificate within 56 days after the

Employer receives this Payment Certificate.

Payment of the amount due in each currency shall be made into the bank account, nominated by the Contractor, in the payment country for this currency) specified in the Contract.

3.13.7 Delayed payments – Deleted

3.13.8 Retention Money

Retention money shall be deducted from each running bill @ 5% subject to a maximum accumulation of 5% of contract price.

Retention Money shall be refunded within 14 days from the date of payment of final bill.

If a Taking-Over Certificate is issued for a Section or part of the Works, a proportion of the Retention Money corresponding to value of the work taken over shall be certified and paid.

When calculating these proportions, no account shall be taken of any adjustments under **Sub-Clause 3.12.6** [*Adjustments for Changes in Legislation*]

3.13.9 Statement at Completion

Within 28 days after receiving the Taking-Over Certificate for the Works, the Contractor shall submit to the Engineer four copies of a Statement at completion with supporting documents, in accordance with **Sub-Clause 3.13.3** [*Application for Interim Payment Certificates*], showing:

- (a) the value of all work done in accordance with the Contract up to the date stated in the Taking-Over Certificate for the Works,
- (b) any further sums which the Contractor considers to be due, and
- (c) an estimate of any other amounts, which the Contractor considers, will become due to him under the Contract. Estimated amounts shall be shown separately in this Statement at completion.

The Engineer shall then certify in accordance with **Sub-Clause 3.13.5** [*Issue of Interim Payment Certificates*].

3.13.10 Application for Final Payment Certificate

Within 56 days after receiving the Performance Certificate, the Contractor shall

Submit, to the Engineer, six copies of a draft final statement with supporting documents showing in detail in a form approved by the Engineer:

- (a) the value of all work done in accordance with the Contract, and
- (b) any further sums which the Contractor considers to be due to him under the Contract or otherwise.

If the Engineer disagrees with or cannot verify any part of the draft final statement, the Contractor shall submit such further information as the Engineer may reasonably require and shall make such changes in the draft as may be agreed between them. The Contractor shall then prepare and submit to the Engineer the final statement as agreed. This agreed statement is referred to in these Conditions as the "Final Statement".

However, if following discussions between the Engineer and the Contractor and any changes to the draft final statement which are agreed, it becomes evident that a dispute exists, the Engineer shall deliver to the Employer (with a copy to the Contractor) an Interim Payment Certificate for the agreed parts of the draft final statement. Thereafter, if the dispute is finally resolved under **Sub-Clause 3.19.2 [Amicable Settlement]**, the Contractor shall then prepare and submit to the Employer (with a copy to the Engineer) a Final Statement.

3.13.11 Discharge

When submitting the Final Statement, the Contractor shall submit a written discharge, which confirms that the total of the Final Statement represents full and final settlement of all moneys due to the Contractor under or in connection with the Contract. This discharge may state that it becomes effective when the Contractor has received the Performance Security and the outstanding balance of this total, in which event the discharge shall be effective on such date.

3.13.12 Issue of Final Payment Certificate

Within 28 days after receiving the Final Statement and written discharge in accordance with **Sub-Clause 3.13.10 [Application for Final Payment Certificate]** and **Sub-Clause 3.13.11 [Discharge]**, the Engineer shall issue, to the Employer, the Final payment Certificate which shall state:

- (a) the amount which is finally due, and
- (b) after giving credit to the Employer for all amounts previously paid by the Employer and for all sums to which the Employer is entitled, the balance (if any) due from the Employer to the Contractor or from the Contractor to the Employer, as the case may be.

If the Contractor has not applied for a Final Payment Certificate in accordance with **Sub-Clause 3.13.10** [*Application for Final Payment Certificate*] and **Sub-Clause 3.13.11** [*Discharge*], the Engineer shall request the Contractor to do so. If the Contractor fails to submit an application within a period of 28 days, the Engineer shall issue the Final Payment Certificate for such amount as he fairly determines to be due.

3.13.13 Cessation of employer's Liability

The Employer shall not be liable to the Contractor for any matter or thing under or in connection with the Contract or execution of the Works, except to the extent that the Contractor shall have included an amount expressly for it:

(a) in the Final Statement and also

(b) (except for matters or things arising after the issue of the Taking-Over Certificate for the Works) in the Statement at completion described in **Sub-Clause 3.13.9** [*Statement at Completion*].

However, this Sub-Clause shall not limit the Employer's liability under his indemnification obligations, or the Employer's liability in any case of fraud, default or misconduct by the Employer.

3.13.14 Currencies of Payment

The Contract Price shall be paid in the currency or currencies named in the Appendix to Tender.

(i) payments and deductions under **Sub-Clause 3.12.5** [*Provisional Sums*] and **Sub-Clause 3.12.6** [*Adjustments for Changes in Legislation*] shall be made in the above currencies and

(ii) other payments and deductions under sub-paragraphs (a) to (d) of **Sub-Clause 3.13.3** [*Application for Interim Payment Certificates*] shall be made in the above currencies;

(a) payment of the damages specified in the Appendix to Tender shall be made in the above currencies;

(b) other payments to the Employer by the Contractor shall be made in the currency in which the sum was expended by the Employer, or in such currency as may be agreed by both Parties;

(c) if any amount payable by the Contractor to the Employer in a particular currency exceeds the sum payable by the Employer. To the Contractor in that currency, the Employer may recover the balance of this amount from the sums otherwise payable to the Contractor and

(d) for the provisions in (b) above, if no rates of exchange are stated in the Appendix to Tender, they shall be those prevailing on the Base Date and determined by the central bank of the Country.

3.14. TERMINATION BY EMPLOYER

3.14.1 Notice to Correct

If the Contractor fails to carry out any obligation under the Contract, the Engineer may by notice require the Contractor to make good the failure and to remedy it within a specified reasonable time.

3.14.2 Termination by Employer

The Employer shall be entitled to terminate the Contract if the Contractor:

- (a) fails to comply with **Sub-Clause 3.4.2** [Performance Security] or with a notice under **Sub-Clause 3.14.1** [*Notice to Correct*],
- (b) abandons the Works or otherwise plainly demonstrate the intention not to continue performance of his obligations under the Contract,
- (c) without reasonable excuse fails:
 - (i) to proceed with the Works in accordance with **Clause 3.7** [*Commencement, Delays and Suspension*], or
 - (ii) subcontracts the whole of the Works or assigns the Contract without the required agreement,
- (d) becomes bankrupt or insolvent, goes into liquidation, has a receiving or administration order made against him, compounds with his creditors, or carries on business under a receiver, trustee or manager for the benefit of his creditors, or if any act is done or event occurs which (under applicable Laws) has a similar effect to any of these acts or events, or
- (e) gives or offers to give (directly or indirectly) to any person any bribe, gift, gratuity, commission or other thing of value, as an inducement or reward:
- (f) for doing or forbearing to do any action in relation to the Contract, or
- (g) for showing or forbearing to show favour or dis-favour to any person in relation to the Contract,
- (h) or if any of the Contractor's Personnel, agents or Subcontractors gives or offers to give (directly or indirectly) to any person any such inducement or reward as is described in this sub-paragraph (f). However lawful inducements and rewards to Contractor's Personnel shall not entitle termination.

In any of these events or circumstances, the Employer may, upon giving 14 days' notice to the Contractor terminate the Contract and expel the Contractor from the Site. However, in the case of sub-paragraph (e) or (f), the Employer may by notice terminate the Contract immediately.

The Employer's election to terminate the Contract shall not prejudice any other

rights of the Employer, under the Contract or otherwise.

The Contractor shall then leave the Site and deliver any required Goods, all Contractor's Documents, and other design documents made by or for him, to the Engineer. However, the Contractor shall use his best efforts to comply immediately with any reasonable instructions included in the notice (i) for the assignment of any subcontract, and (ii) for the protection of life or property or for the safety of the Works.

After termination, the Employer may complete the Works and/or arrange for an' other entities to do so. The Employer and these entities may then use any Goods, Contractor's Documents and other design documents made on behalf of the Contractor.

The Employer shall then give notice that the Contractor's Equipment and Temporary Works will be released to the Contractor at or near the Site. The Contractor shall promptly arrange their removal, at the risk and cost of the Contractor. However, if by this time the Contractor has failed to make a payment due to the Employer, these items may be sold by the Employer in order to recover this payment. Any balance of the proceeds shall then be paid to the Contractor.

(i) In addition to the reasons listed above, the employer may terminate the contract as per Clause 2.2.14 (x) of Section-2: Instruction to bidders if any directive is issued by the Government of India through Ministry of Shipping to make alternative arrangement for meeting the capital / maintenance dredging; the employer will issue a 30 days' notice and rescind the agreement for the ongoing dredging work and the contractor is obliged to make arrangements for smooth hand over of the site and dredging work. The contractor has to hand over the site and demobilize his entire equipment at the end of the notice period. The Contractor has to make every effort for smooth handing over of the site through a joint survey as per Clause 6.20 (final survey to determine levels after dredging) Section 6 of this tender. The Contractor will be paid a lumpsum all-inclusive amount at 2.5% of the contract value towards mobilisation and de-mobilization for the dredging equipments (entire marine spread) deployed at Deendayal Port till such date. The Committee under the chairmanship of Chairman with Chief Engineer, FA&CAO and Deputy Conservator of the Port would oversee the above process and appraise the Board with respect to the amicable settlement on account of termination of agreement due to receipt of directive explained at sub-Clause (x) of 2.2.14 – Section-2 above.

3.14.3 Valuation at Date of Termination

As soon as practicable after a notice of termination under **Sub- Clause 3.14.2**

[*Termination by Employer*] has taken effect, the Engineer shall proceed in accordance with **Sub-Clause 3.3.4** [*Determinations*] to agree or determine the value of the Works, Goods and Contractor's Documents, and any other sums due to the Contractor for work executed in accordance with the Contract.

3.14.4 Payment after Termination

After a notice of termination under **Sub-Clause 3.14.2** [*Termination by Employer*] has taken effect, the Employer may:

- (a) proceed in accordance with **Sub-Clause 3.2.4** [*Employer's Claims*],
- (b) withhold further payments to the Contractor until the costs of execution, completion and remedying of any defects, damages for delay in completion (if any), and all other costs incurred by the Employer, have been established, and/or
- (c) recover from the Contractor any losses and damages incurred by the Employer and any extra costs of completing the Works, after allowing for any sum due to the Contractor under **Sub-Clause 3.14.3** [*Valuation at Date of Termination*]. After recovering any such losses, damages and extra costs, the Employer shall pay any balance, if available to the Contractor

3.14.5 Employer's Entitlement to Termination

The Employer shall be entitled to terminate the Contract, at any time for the Employer's Convenience, by giving notice of such termination to the Contractor. The termination shall take effect 14 days after the later of the dates on which the Contractor receives this notice or the Employer returns the Performance Security. The Employer shall not terminate the Contract under this Sub-Clause in order to execute the Works himself or to arrange for the Works to be executed by another contractor.

After this termination, the Contractor shall be paid in accordance with **Sub-Clause 3.18.6** [*Optional Termination, Payment and Release*].

3.15. deleted

3.16. RISK AND RESPONSIBILITY

3.16.1 Indemnities

The Contractor shall indemnify and hold harmless the Employer, the Employer's Personnel, and their respective agents, against and from all claims, damages, losses and expenses (including legal fees and expenses) in respect of:

- (a) bodily injury, sickness, disease or death, of any person whatsoever arising out of or in the course of or by reason of the Contractor's design (if any), the execution and completion of the Works and the remedying of any defects, unless

attributable to any negligence, willful act or breach of the Contract by the Employer, the Employer's Personnel, or any of their respective agents, and

(b) damage to or loss of any property, real or personal (other than the Works), to the extent that such damage or loss:

- arises out of or in the course of or by reason of the Contractor's design (if any), the execution and completion of the Works and the remedying of any defects, and
- is attributable to any negligence, willful act or breach of the Contract by the Contractor, the Contractor's Personnel, their respective agents, or anyone directly or indirectly employed by any of them.

The Employer shall indemnify and hold harmless the Contractor, the Contractor's Personnel, and their respective agents, against and from all claims; damages, losses and expenses (including legal fees and expenses) in respect of (1) bodily injury, sickness, disease or death, which is attributable to any negligence, willful act or breach of the Contract by the Employer, the Employer's Personnel, or any of their respective agents, and (2) the matters for which liability may be excluded from Insurance cover, as described in sub-paragraphs (c)(i), (ii) and (iii) of **Sub-Clause 3.17.3** [*Insurance Against Injury to Persons and Damage to Property*].

3.16.2 deleted

3.16.3 Employer's Risks

The risks referred to in **Sub-Clause 3.16.4** below are

(a) war, hostilities (whether war be declared or not), invasion, act of foreign enemies,

(b) rebellion, terrorism, revolution, insurrection, military or usurped power, or civil war, within the Country,

(c) riot, commotion or disorder within the Country by persons other than the Contractor's Personnel and other employees of the Contractor and Subcontractors,

(d) munitions of war, explosive materials, ionizing radiation or contamination by radio-activity, within the Country, except as may be attributable to the Contractor's use of such munitions, explosives, radiation or radio-activity,

(e) pressure waves caused by aircraft or other aerial devices travelling at sonic or supersonic speeds,

(f) design of any part of the Works by the Employer's Personnel or by others for whom the Employer is responsible, and

(g) any operation of the forces of nature which is Unforeseeable or against, which an experienced contractor could not reasonably have been expected to have taken adequate preventative precautions.

3.16.4 Consequences of Employer's Risks

If and to the extent that any of the risks listed in **Sub-Clause 3.16.3** above results in loss or damage to the Works, Goods and the Contractor's equipment and/or property or Contractor's Documents, the Contractor shall promptly give notice to the Engineer and shall rectify this loss or damage to the extent required by the Engineer.

If the Contractor suffers delay and/or incurs Cost from rectifying this loss or damage, the Contractor shall give a further notice to the Engineer and shall be entitled subject to **Sub-Clause 3.19.1** [*Contractor's Claims*] to:

(a) an extension of time for any such delay, if completion is or will be delayed, under **Sub-Clause 3.7.4** [*Extension of Time for Completion*], and

(b) Payment of any such Cost, which shall be included in the Contract Price in the case of sub-paragraphs (f) and (g) of **Sub-Clause 3.16.3** [*Employer's Risks*], reasonable profit on the Cost shall also be included.

3.16.5 Intellectual and Industrial Property Rights

In this Sub-Clause, "infringement" means an infringement (or alleged infringement) of any patent, registered design, copyright, trademark, trade name, trade secret or other intellectual or industrial property right relating to the Works; and "claim" means a claim (or proceedings pursuing a claim) alleging an infringement.

Whenever a Party does not give notice to the other Party of any claim within 28 days of receiving the claim, the Party giving notice shall be deemed to have waived any right to indemnity under this Sub-Clause.

The Employer shall Indemnify and hold the Contractor harmless against and from any claim alleging an infringement which is or was:

- (a) an unavoidable result of the Contractor's compliance with the Contract,
or
 - (b) a result of any Works being used by the Employer:
 - (i) for a purpose other than that indicated by, or reasonably to be inferred from, the Contract, or
 - (ii) in conjunction with anything not supplied by the Contractor, unless such use was disclosed to the Contractor prior to the Base Date or is stated in the Contract.
- The Contractor shall indemnify and hold the Employer harmless against and from any other claim which arises out of or in relation to (i) the manufacture, use, sale or import of any Goods, or (ii) any design for which the Contractor is responsible.

If a Party is entitled to be indemnified under this Sub-Clause, the indemnifying Party may (at its cost) conduct negotiations for the settlement of the claim, and any litigation or arbitration, which may arise from it. The other Party shall, at the request and cost of the indemnifying Party, assist in contesting the claim. This other Party (and its Personnel) shall not make any admission, which might be prejudicial to the indemnifying Party, unless the indemnifying Party failed to take over the conduct of any negotiations, Litigation or arbitration upon being requested to do so by such other Party.

3.16.6 Limitation of Liability

Neither Party shall be liable to the other Party for loss of use of any Works, loss of profit, loss of any contract or for any indirect or consequential loss or damage which may be suffered by the other Party in connection with the Contract, other than Sub-Clause **3.16.1** [*Indemnities*].

The total liability of the Contractor to the Employer, under or in connection with the Contract other than under **Sub-Clause 3.4.19** [*Electricity*], **Sub-Clause 3.16.1** [*Indemnities*] and **Sub-Clause 3.16.5** [*Intellectual and Industrial Property Rights*], shall not exceed Accepted Contract Amount.

This Sub-Clause shall not limit liability in any case of fraud, deliberate default or reckless misconduct by the defaulting Party.

3.17 INSURANCE

3.17.1 General Requirements for Insurances

The Contractor shall be responsible for effecting and maintaining the insurance specified in the relevant Sub-Clause.

Each insurance shall be effected with insurers and in terms approved by the Employer. These terms shall be consistent with any terms agreed by both Parties

before the date of the Letter of Acceptance. This agreement of terms shall take precedence over the provisions of this Clause.

Each policy insuring against loss or damage shall provide for payments to be made in the currencies required to rectify the loss or damage. Payments received from insurers shall be used for the rectification of the loss or damage.

The Contractor shall, within the respective periods stated in the Appendix to Tender (calculated from the Commencement Date), submit to the Employer:

(a) evidence that the insurances described in this Clause have been effected, and

(b) copies of the policies for the insurances described in **Sub- Clause 3.17.2** [*Insurance for Works and Contractor's Equipment*] and **Sub-Clause 3.17.3** [*Insurance against Injury Persons and Damage to Property*].

When each premium is paid, the Contractor shall submit evidence of payment to the Employer.

The Contractor shall comply with the conditions stipulated in each of the insurance policies. The Contractor shall keep the insurers informed of any relevant changes to the execution of the Works and ensure that insurance is maintained in accordance with this Clause.

The Contractor shall not make any material alteration to the terms of any insurance without the prior approval of the Employer. If the Contractor makes (or attempts to make) any alteration, the same shall be informed to the Employer in advance.

If the Contractor fails to effect and keep in force any of the insurances it is required to effect and maintain under the Contract, or fails to provide satisfactory evidence and copies of policies in accordance with this Sub-Clause, the Employer may (at its option and without prejudice to any other right or remedy) effect insurance for the relevant coverage and pay the premiums due. The Contractor shall pay the amount of these premiums to the Employer, and the Contract Price shall be adjusted accordingly.

Nothing in this Clause limits the obligations, liabilities or responsibilities of the Contractor, under the other terms of the Contract or otherwise. Any amounts not insured or not recovered from the insurer shall be borne by the Contractor. In accordance with these obligations; liabilities or responsibilities. However, if the Contractor fails to effect and keep in force an insurance which is available and which it is required to effect and maintain under the Contract, and the Employer neither approves the omission nor effects insurance for the coverage relevant to this default, any moneys which should have been recoverable under this insurance shall be paid by the Contractor. Payments shall be subject to **Sub-Clause 3.2.4** [*Employer's Claims*] or **Sub- Clause 3.19.1** [*Contractor's Claims*], as applicable

3.17.2 Insurance for works and Contractor's equipment

The Contractor shall insure the Plant, Materials and Contractor's Documents for not less than the full reinstatement cost including the costs and professional fees and profit. This insurance shall be effective from the date by which the evidence is to be submitted under sub-paragraph (b) of **Sub-Clause 3.17.1** [*General Requirements for Insurances*], until the date of issue of the Taking-Over Certificate for the Works.

The Contractor shall maintain this insurance to provide cover until the date of issue of the Performance Certificate, for loss or damage for which the Contractor is liable arising from a cause occurring prior to the issue of the Taking-Over Certificate, and for loss or damage caused by the Contractor in the course of any other operations.

The Contractor shall insure the Contractor's Equipment for not less than the full replacement value, Including delivery to Site. For each item of Contractor's Equipment, the insurance shall be effective while it is transported to the Site and until it is no longer required as Contractor's Equipment. The assurance

(a) shall cover all loss and damage from any cause not listed in **Sub-Clause 3.16.3** [*Employer's Risks*],

(b) shall also cover loss or damage to a part of the Works which is attributable to the use or occupation by the Employer of another part of the works, and loss or damage from the risks listed in sub-paragraphs (c), (g) of **Sub Clause 3.16.3** [*Employer's Risks*], excluding (in each case) risks which are not insurable at commercially reasonable terms, with deductibles per occurrence of not more than the amount stated in the Appendix to Tender (if an amount is not so stated, this sub-paragraph (d) shall not apply), and

(c) may however exclude loss of, damage to, and reinstatement of:

(i) a part of the Works which is in a defective condition due to a defect in its design, materials or workmanship (but cover shall include any other parts which are lost or damaged as a direct result of this defective condition and not as described in sub-paragraph (ii) below),

(ii) a part of the Works which is lost or damaged in order to reinstate any other part of the Works if this other part is in a defective condition due to a defect in its design, materials or workmanship,

(iii) a part of the Works which has been taken over by the Employer, except to the extent that the Contractor is liable for the loss or damage, and

(iv) goods while they are not in the Country,

If, more than one year after the Base Date; the cover described in sub-paragraph (b) above ceases to be available at commercially reasonable terms, the Contractor shall give notice to the Employer' with supporting particulars. The Employer shall then (i) be entitled subject to **Sub-Clause 3.2.4 [Employer's Claims]** to payment of an amount equivalent to such commercially reasonable terms as the Contractor should have expected to have paid for such cover, and (ii) be deemed, unless he obtains the cover at commercially reasonable terms, to have approved the omission under **Sub-Clause 3.17.1 [General Requirements for Insurances]**

3.17.3 Insurance against Injury to Persons and Damage to Property

The Contractor shall insure against each Party liability for any loss, damage, death or bodily injury which may occur to any physical property (except things insured under **Sub-Clause 3.17.2 [Insurance for Works and Contractor's Equipment]** or to any person (except persons insured under **Sub-Clause 3.17.4 [Insurance for Contractor's Personnel]**), which may arise out of the Contractor's performance of the Contract and Occurring before the issue of the Performance Certificate.

This insurance shall be for a limit per occurrence of not less than the amount stated in the Appendix to Tender, with no limit on the number of occurrences. If an amount is not stated in the Appendix to Tender, this Sub-Clause shall not apply.

Unless otherwise stated in the Particular Conditions, the insurances specified in this Sub-Clause:

- (a) shall be effected and maintained by the Contractor as insuring Party,
- (b) shall be extended to cover liability for all loss and damage to the Employers property (except things Insured under **Sub-Clause 3.17.2**) arising out of the contractors' performance of the Contract, and
- (c) may however exclude liability to the extent that it arises from:
 - (i) the Employer's right to have the Permanent Works executed on, over, under, in or through any land' and to occupy this land for the Permanent Works,
 - (ii) damage which is an unavoidable result of the Contractor's obligations to execute the Works and remedy any defects, and
 - (iii) a cause listed in **Sub-Clause 3.16.3** [*Employer's Risks*], except to the extent that cover is available at commercially reasonable terms.

3.17.4 Insurance for Contractor's Personnel

The Contractor shall effect and maintain insurance against liability for claims, damages, losses and expenses (including legal fees and expenses) arising from injury, sickness, disease or death of any person employed by the Contractor or any other of the Contractor's Personnel.

The Employer and the Engineer shall also be indemnified under the policy of insurance, except that this insurance may exclude losses and claims to the extent that they arise from any act or neglect of the Employer or of the Employer's Personnel.

The insurance shall be maintained in full force and effect during the whole time that these personnel are assisting in the execution of the Works. For a Subcontractor's employees, the insurance may be effected by the Subcontractor, but the Contractor Shall be responsible for compliance with this Clause.

3.17.5 Insurance for floating craft

Notwithstanding what is stated in the above clauses, all the floating crafts including dredgers deployed in the operation should be insured under Marine Hull Policy and covered for various Port risks including pollution and wreck removal by a P & I club which is a member of an International Group of P & I Club.

3.18. FORCE MAJEURE

3.18.1 Definition of Force Majeure

In this Clause, "Force Majeure" means an exceptional event or circumstance:

- (a) which is beyond a Party's control,
- (b) which such Party could not reasonably have provided against before entering into the Contract,
- (c) which, having arisen, such Party could not reasonably have avoided or overcome, and
- (d) which is not substantially attributable to the other Party. Force Majeure may include, but is not limited to, exceptional events or circumstances of the kind listed below, so long as conditions (a) to (d) above are satisfied:
 - (i) war, hostilities (whether war be declared or not), invasion, act of foreign enemies,
 - (ii) rebellion, terrorism, revolution, insurrection, military or usurped power, or civil war,
 - (iii) riot, commotion, disorder, strike or lockout by persons other than the Contractor's Personnel and other employees of the Contractor and Sub-contractors,
 - (iv) munitions of war, explosive materials, ionizing radiation or contamination by radio-activity, except as may be attributable to the Contractor's use of such munitions, explosives, radiation or radio- activity, and
 - (v) natural catastrophes such as earthquake, tsunami, hurricane, typhoon or volcanic activity.

3.18.2 Notice of Force `Majeure

If a Party is or will be prevented from performing any of its obligations under the Contract by Force Majeure, then it shall give notice to the other Party of the event or circumstances constituting the Force Majeure and shall specify the obligations, the performance of which is or will be prevented. The notice shall be given within 14 days after the Party became aware, (or should have become aware), of the relevant event or circumstance constituting Force Majeure.

The Party shall, having given notice, be excused performance of such obligations for so long as such Force Majeure prevents it from performing them.

Notwithstanding any other provision of this Clause, Force Majeure shall not apply to obligations of either- Party to make payments to the other Party under the Contract.

3.18.3 Duty to Minimize Delay

Each Party shall at all times use all reasonable endeavors to minimize any delay in the performance of the Contract as a result of Force Majeure.

A Party shall give notice to the other Party when it ceases to be affected by the Force Majeure.

3.18.4 Consequences of Force Majeure

If the Contractor is prevented from performing any of his obligations under the Contract by Force Majeure of which notice has been given under **Sub-Clause 3.18.2** [*Notice of Force Majeure*], and suffers delay and/or incurs Cost by reason of such Force Majeure, the Contractor shall be entitled subject to **Sub- Clause 3.19.1**[*Contractor's Claims*] to:

(a) an extension of time for any such delay, if completion is or will be delayed, under **Sub-Clause 3.7.4** [*Extension of Time for Completion*], and

(b) if the event or circumstance is of the kind described in sub- paragraphs (i) to (v) of **Sub-Clause 3.18.1** [*Definition of Force Majeure*] and, in the case of sub- paragraphs (ii) to (iv), occurs in the Country, payment of any such Cost.

After receiving this notice, the Engineer shall proceed in accordance with **Sub Clause 3.3.4** [*Determinations*] to agree or deter-mine these matters.

3.18.5 Force Majeure Affecting Subcontractor

If any Subcontractor is entitled under any contract or agreement relating to the Works to relief from force majeure on terms additional to or broader than those specified in this Clause, such additional or broader force majeure events or circumstances shall not excuse the Contractor's non-performance or entitle him to relief under this Clause.

3.18.6 Optional, Termination Payment and Release

If the execution of substantially all the Works in progress is prevented for a continuous period of 84 days by reason of Force Majeure of which notice has been given under **Sub-Clause 3.18.2** [*Notice of Force Majeure*], or for multiple periods which total more than 140 days due to the same notified Force Majeure, then either Party may give to the other Party a notice of termination of the Contract. In this event, the termination shall take effect 7 days after the notice is given, and the Contractor shall proceed. Upon such termination, the Engineer

shall determine the value of the work done and issue a Payment Certificate which shall include:

- (a) the amounts payable for any work carried out for which a price is stated in the Contract;
- (b) the Cost of Plant and Materials ordered for the Works which have been delivered to the Contractor, or of which the Contractor is liable to accept delivery: this Plant and Materials shall become the property of (and be at the risk of the employer when paid for by the Employer, and the Contractor shall place the same at the Employer's disposal;
- (c) any other cost or liability which in the circumstances was reasonably incurred by the Contractor in the expectation of completing the Works;
- (d) the cost of removal of Temporary Works and Contractor's Equipment from the Site and the return of these items to the Contractor's works in his country (or to any other destination at no greater cost)

3.18.7 Release from Performance under the Law

Notwithstanding any other provision of this Clause, if any event or circumstance outside the control of the Parties (including, but not limited to, Force Majeure) arises which makes it impossible or unlawful for either or both Parties to fulfil its or their contractual obligations or which, under the law governing the Contract, entitles the Parties to be released from further performance of the Contract, then upon notice by either Party to the other Party of such event or circumstance:

- (a) the Parties shall be discharged from further performance, without prejudice to the rights of either Party in respect of any previous breach of the Contract, and
- (b) the sum payable by the Employer to the Contractor shall be the same as would have been payable under **Sub-Clause 3.18.6** [Optional Termination, Payment and Release] if the Contract had been terminated under **Sub-Clause 3.18.7**.

3.19. CLAIM, DISPUTES AND ARBITRATION

3.19.1 Contractor's Claims

If the Contractor considers himself to be entitled to any extension of the Time for Completion and/or any additional payment, under any Clause of these Conditions or otherwise in connection with the Contract, the Contractor shall give notice to the Engineer, describing the event or circumstance giving rise to the claim. The notice shall be given as soon as practicable and not later than

28 days after the Contractor became aware; or should have become aware, of the event or circumstance.

If the Contractor fails to give notice of a claim within such period of 28 days, the Time for Completion shall not be extended, the Contractor shall not be entitled to additional payment, and the Employer shall be discharged from all liability in connection with the claim. Otherwise, the following provisions of this Sub-Clause shall apply.

The Contractor shall also submit any other notices which are required by the Contract, and supporting particulars for the claim, all as relevant to such event or circumstance.

The Contractor shall keep such contemporary records as may be necessary to substantiate any claim, either on the Site or at another location acceptable to the Engineer. Without admitting the Employer's liability, the Engineer may, after receiving any notice under this Sub-Clause, monitor the record-keeping and/or instruct the Contractor to keep further contemporary records. The Contractor shall permit the Engineer to inspect all these records and shall (if instructed) submit copies to the Engineer.

Within 42 days after the Contractor became aware (or should have become aware) of the event or circumstance giving rise to the claim, or within such other period as may be proposed by the Contractor and approved by the Engineer, the Contractor shall send to the Engineer a fully detailed claim which includes full supporting particulars of the basis of the claim and of the extension of time and/or additional payment claimed. If the event or circumstance giving rise to the claim has a continuing effect:

- (a) this fully detailed claim shall be considered as interim;
- (b) the Contractor shall send further interim claims at monthly intervals, giving the accumulated delay and/or amount claimed, and such further particulars as the Engineer may reasonably require; and
- (c) the Contractor shall send a final claim within 28 days after the end of the effects resulting from the event or circumstance, or within such other period as may be proposed by the Contractor and approved by the Engineer.

Within 42 days after receiving a claim or any further particulars supporting a previous claim, or within such other period as may be proposed by the Engineer and approved by the Contractor, the Engineer shall respond with approval, or with disapproval and detailed comments. He may also request any necessary

further particulars but shall nevertheless give his response on the principles of the claim within such time.

Each Payment Certificate shall include such amounts for any claim as have been reasonably substantiated as due under the relevant provision of the Contract. Unless and until the particulars supplied are sufficient to substantiate the whole of the claim, the Contractor shall only be entitled to payment for such part of the claim, as he has been able to substantiate.

The Engineer shall proceed in accordance with **Sub-Clause 3.3.4 [Determinations]** to agree or determine (i) the extension (if any) of the Time for Completion (before or after its expiry) in accordance with **Sub-Clause 3.7.4 [Extension of Time for Completion]**, and/or (ii) the additional payment (if any) to which the Contractor is entitled under the Contract.

The requirements of this Sub-Clause are in addition to those of any other Sub-Clause, which may apply to a claim. If the Contractor fails to comply with this or another Sub-Clause in relation to any claim, any extension of time and/or additional payment shall take account of the extent (if any) to which the failure has prevented or prejudiced proper investigation of the claim, unless the claim is excluded under the second paragraph of this Sub-Clause.

3.19.2 Amicable Settlement

In case of any disputes, both Parties shall attempt to settle the dispute amicably before the commencement of arbitration. A Committee under the chairmanship of Chairman with Chief Engineer, FA&CAO and Deputy Conservator of the Port may examine the dredging related dispute and give its recommendation and the Board for taking a view on the dispute. If the dispute is not settled amicably, the same shall be settled by Arbitrations.

However, unless both Parties agree otherwise, arbitration may be commenced on or after the fifty-sixth day after the day on which notice of dissatisfaction was given, even if no attempt at amicable settlement has been made.

3.19.3 Arbitration

Unless settled amicably, disputes shall be settled by arbitration under the provisions of Indian Arbitration and Conciliation Act-1996. As per this, Dispute Resolution Board shall be set up with representatives of both parties on award of work to continuously facilitate resolution of issues. The place of arbitration shall be Deendayal Port. Arbitral award has to be a reasoned award and in case interest is allowed on arbitration amount it shall be limited to SBI Prime Lending

Rate + 2%.

If any arbitration award shall be referred to Conciliation Committee Councils comprising of independent subject expert. The award by the Conciliation Committee / Councils shall be placed before the Board of DPA for consideration if agreed by both the party.

3.20. EXPLOSIVES No explosives shall be permitted under this contract.

3.21. PROPERTY IN EXCAVATED MATERIALS

All fossils, coins, articles of value or antiquity, and structures and other remains or items of geological or archaeological interest found during excavation / dredging shall be placed under the care and authority of the Employer and are the property of the Employer.

3.22 DRAWINGS AND DESIGNS

a) General details of the works are shown on the drawings accompanying this tender document. The Engineer will supply to the contractor from time to time during the progress of the works such further working drawings as will be necessary in the opinion of the Engineer for the proper and adequate execution and maintenance of the works in accordance with the Engineer's designs and/or any modification thereof as decided by the Engineer and the Contractor shall carry out the work in accordance with the said working drawings. Two sets of such working drawings will be issued. If more sets are required by the Contractor, he will have to make his own arrangement at his cost.

b) In the event of the Contractor proposing any alteration/modification to the Engineer's design, detail, method of construction, he shall at his own expenses prepare and submit for approval of the Engineer copies in duplicate (in the first instance) of detailed working drawings which may be required for such alteration/modification and at the same time call the attention of the Engineer to any alternative detail or modification of the Contract drawings which the Contractor may wish to make at least 30 days prior to the commencement of the work or part of the work to which such drawings relate. The contractor shall at the same time, if so required by the Engineer, furnish calculation sheets in duplicate relating to the strength and anticipated deflections in respect of such altered/ modified works. The Engineer will, after any such alteration which he may approve, record on the copies as amended his approval and will return one copy of the drawings and calculation sheets to the contractor, who shall carry out the work in accordance therewith. The Contractor shall forward to the Engineer three additional copies of the working drawings and calculation sheets as

approved, in addition to these working drawings and calculation sheets as approved. In addition to these working drawings are also to be submitted (the same procedure as in the case of the Contractor) in respect of any work proposed to be executed by sub-contractors. The approval of the Engineer of all or any of the calculation sheets, drawings shall not relieve the Contractor of responsibility in connection with the execution of the altered/modified or sub- contractors works.

c) The complete sets of tracing on linen or tracing film of all drawings showing every and all works 'As Made' under the contract shall be made by the Contractor at his own expense and delivered to the Engineer within one month of the completion of the various sections of the work or at such times as directed by the Engineer. All departure alteration/modifications from the Contract Drawings and supplementary working drawings issued by the Engineer also shall be incorporated in the "As Made" drawings. The drawings shall be fully dimensioned, of an approved size and with the standard litho black or as approved by the Engineer.

3.23 deleted

3.24 Contract Supersedes Previous Documents

The Contractor shall have no right to increase in the rates in the Bill of Quantities nor any other right whatsoever by reason of any representative explanation or statement or alleged representative explanation or statement made or by reason of any information, promise or guarantee given or alleged to have been given to him by any person (whether in the employment of the Employer or not) before the date of the contract, embodies the whole arrangements between the parties with reference to the contract hereby constituted and all previous, correspondence/ negotiation/ representations/ explanations/ statements/ promises or guarantee, whether oral or written shall be excluded.

3.25. Bribes and Commission

Any bribe, commission, gift or advantage given, promised or offered by or on behalf of the Contractor or his or their behalf to any officer, servant, representative or agent of the Engineer or to any person on his behalf in relation to the obtaining or to be execution of this or any other contract with the Employer shall in addition to any criminal liability which he may incur subject the contractor to the cancellation of this and all other contracts with the Employer and also to the payment of any loss or damage resulting from any such cancellation, and the Employer shall be entitled to deduct the amounts so payable from any money otherwise due to the contractor under this or any other contract. Any question

or disputes as to the commission of any offence under the present clause shall be settled by the Engineer in such a manner and on such evidence or information as he shall think fit and consider sufficient and his decision shall be final and conclusive.

3.26. Schedule of rates

3.26.1 Preamble

- a) The Schedule of Rates shall be read with all other sections of this Bidding Document.
- b) The CONTRACTOR is deemed to have studied the drawings, specifications and details of works to be done within the Time Schedule and should have acquainted himself with the conditions prevailing at site.
- c) The quantity shown against the various items are only approximate and may vary to any extent individually as detailed in General Conditions of Contract. No claim shall be entertained during the currency of this Contract towards any items due to the above including where the CONTRACTOR has quoted low/ high rates.
- d) EMPLOYER reserves the right to interpolate or extrapolate the rates for any new item of work not covered in Schedule of Rates from the similar items already available in Schedule of Rates. All the works shall be measured upon completion and paid for at the rate quoted and accepted in the "Schedule of Rates". In case any activity though specifically not covered in Schedule of Rates descriptions but the same is covered under scope of work/ scope of supply/ specification/ drawings etc. no extra claim on this account shall be entertained, since Schedule of Rates is to be read in conjunction with all other documents forming part of the Contract.
- e) All items of work mentioned in the Schedule of Rates shall be carried out as per the specifications, drawings and instructions of EMPLOYER and the rates are deemed to be inclusive of material, consumable, labour, supervision, tools & tackles and detailing of construction/fabrication drawings wherever required as called for in the detail specification and conditions of the Contract.
- f) EMPLOYER reserves the right to cancel/ delete/curtail any item or group of work if necessary. Such a step shall not be construed as reason for changing the rates.

3.26.2 General Terms of Payment

- g) Mobilisation and demobilisation charges shall include hire charges of the equipment and also the cost incurred for personnel during journey to the site and till the time of its demobilisation, including insurance of equipment and personnel, all complete. Mobilisation is deemed to be complete after procedure document is approved, all equipment, dredging plant, marine spread ~~and~~ personnel are mobilised at the site as per technical specifications and certification.

- h) The contractor shall make his own arrangements for their personnel towards travel, stay, food, water, fuel etc., within his lump sum costs.
- i) Any downtime on account of weather, equipment/vessel/positioning breakdown shall be to the Contractors account.
- j) It is the responsibility of the Dredging contractor to obtain all the clearances from appropriate authorities for the mobilisation of the dredging spread and marine spread. Owner shall provide only authorisation letters.
- k) Quoted price shall be in Indian Rupees only and is inclusive of all taxes except GST, which shall be reimbursed as per actual.

3.27. Idle Time

Idle time charges are not payable for idling of any dredger or other equipment including the men and machinery for reasons whatsoever under this contract and no such claims shall be entertained even at a later date.

3.29. Goods and Services Tax

The quoted rate of the tenderer shall be inclusive of all taxes and duties excluding applicable GST. The Contractor may raise GST invoice as monthly running bills notwithstanding the payment from DPA. The Contractor has to comply the GST remittance and filing as per statutory requirements. GST will be reimbursed separately on confirmation of credit in DPA GST Portal. DPA shall deduct TDS from the claim bill as per the statutory provisions of prevailing laws

- (i) The contractor shall quote the price exclusive of GST. The contractor shall quote prevailing GST rate separately, which shall be reimbursed by DPT after ascertaining necessary compliance as per Goods & Service Tax Act, 2017.
- (ii) All other duties, taxes, cess, applicable if any, shall be borne by the contractor.
- (iii) TDS under GST Act is required to be deducted @2% (1% CGST and 1% SGST or 2% IGST) or as admissible from payment /credit given to the contractor.
- (iv) The element of GST will not be considered for evaluation of financial purpose.

Also change if any in the Government Policy or Amendment in Tax structure the same will be applicable from time to time.

3.29.1 Income Tax

Income tax on the gross amount of the contractor's bill shall be deducted from as per Section 194C of the Income Tax Act as applicable from time to time.

3.30. Security clearance

Prequalification of bidders is subject to security clearance from Govt. The bids received from any tenderer may be summarily rejected On National Security consideration without any intimation thereof to the tenderer.

The bidders shall note that Ministry of Home Affairs (MHA) is one of the agencies for according national security clearance to the bidders participating in PPP / dredging projects in Major Ports in India. Recently, Ministry of Home Affairs has developed “e-Sahaj” (<https://esahaj.gov.in/notices>) portal for submission of security clearance proposals and is functional. Ministry of Shipping is included in e-Sahaj. This e-Sahaj portal is effective from 01/09/2018. In addition to the registration and submission of requisite information for security clearance through e-sahaj portal, bidders are instructed to submit the required details/ information(s) for obtaining security clearances from Govt. as per the Formats/ proforma attached at **Appendix-A(1)**. Bidders are requested to upload the scanned copies of alongwith technical bid as well as provide 12 nos. of hard copies of complete set of documents duly signed and stamped for security clearance. Employer has adopted the above requirement as a prudent measure to meet any contingency arising due to constraints whatsoever in the operation of the e-sahaj portal, so that the employer can forward all the details of the bidders to the Government for obtaining their respective security clearance.

All forms meant for submitting security clearance from MHA have to be uploaded in e-sahaj portal. The process for submitting security clearance from MHA will be as follows:

- (i) All bidders participating in the dredging project will have to register themselves in e-sahaj portal. The log-in id and password will be provided through email and SMS through Mobile No. (STD/ ISD/Local). Bidders then need to fill up the form, upload the document as instructed and then send to concerned port.
- (ii) Bidder is requested to provide 12 copies of complete set of submitted documents for the security clearance.
- (iii) Chief Engineer, Deendayal Port is the Nodal Officer for the e-sahaj portal. He will be assisted by an Associate Officer. The Nodal Officer / Associate Officer after verifying the application would forward the proposal to the Ministry of Shipping.
- (iv) Ministry of Shipping on receipt of the proposal would verify the application and if complete in all respects, forward the same electronically to the MHA.

The bidders are to register on the e-sahaj portal, and the following are relevant details:

1. This form is for online registration of organizations or individuals seeking for security clearance.
2. Registration of organizations/firms/companies is to be done once, by the person authorized by the same.
3. Registration of an individual applying for security clearance, is to be done by himself on the portal.
4. Person doing the registration for himself or on behalf of any organization/firm/company will be authenticated through OTP and also a documentary ID proof needs to be attached.
5. Registration is a two-step process, after successful completion of the step one, an email verification link is sent to the user's email. On successful registration by the portal, a registration ID will generated by the system to be used as login Id and it will be sent to the registrant's email. The password will be sent on the registered mobile number.
6. After successful registration, user needs to logged in to the portal to fill and submit the applicable security clearance form.
7. User will be prompted to change the system generated password to his own password.
8. Letter of authorization is an authorization letter from the company official on the letterhead of the company, who have authorized the registrant to register on the portal on behalf of the company.

Following are the some of the details to be submitted:

- (a) User-Application Details
- (b) Company Details (as applicable)
- (c) Foreign Collaborator Details (as applicable)
- (d) Board of Director Details (as applicable)
- (e) Share Holder Details (as applicable)
- (f) Details of Criminal Cases (as applicable)
- (g) User - Application Preview (as applicable)

The bidders whose security clearances have been received from the Government only shall be considered for pre-qualified.

Also change if any in the Guidelines issued by the Ministry of Shipping on security clearance, same will be applicable from time to time.

Bidders whose security clearance has been granted by Ministry, the validity of period will be subject to following condition as per the guidelines issued by Ministry dated 12/02/2016:

- (1) It is mandatory to inform the Administrative Ministry / Department regarding

any changes in management, control or ownership pattern of company /operators executing the project or change in shareholding pattern in excess of 10% in the company to the Ministry of Shipping within two weeks and any lapse can result in withdrawing the security clearance already granted.

(2) The operation in Pakistan, if any of such entity who has been granted security clearance by the Ministry of Shipping should be suitable firewalled from the contract/operations in India and no Pakistani national or a person of Pakistan origin should be engaged by the company for this project.

(3) If the entity is found indulging in acts inimical to India's national security, the license/tender/contract is liable to be terminated.

(4) The company should inform the administrative Ministry regarding criminal case(s), if any registered against the company, owner, promoter or any of its directors after the issue of license/concession or permission or award of contract, as the case may be. The administrative Ministry in turn will inform the MHA of Such development.

(5) Approval for any change in equipment or vessel involving foreign origin and clearance for engagement of foreign personnel shall be obtained from all security agencies.

3.31 INTEGRITY PACT

INTEGRITY PACT IN DEENDAYAL PORT AUTHORITY

The Central Vigilance Commission (CVC) has been promoting integrity, transparency, equity and competitiveness in transactions by various organizations of the Government of India. Public procurement is an area of concern for the CVC, and many steps have been taken to put proper systems in place. In this context, Integrity Pact (IP), a tool conceptualized and promoted by Transparency International, an international NGO, aimed at preventing corruption in public contracting, has been found useful. It has been decided by Ministry of Shipping that all organizations under the Ministry will implement IP. IP should cover every tender / procurement above a specified threshold value. The threshold value of contracts / procurements / transactions incorporating IP would be such that it covers 90% by value of all contracts / procurements / transactions of the organization in the last 3 years. Presently the threshold is fixed as Rs. 50 lakhs. IP essentially envisages an agreement between prospective vendors / bidders, and Deendayal Port Authority, committing the persons / officials of both sides not to resort to any corrupt practice in any aspect of the contract at any stage. Only those vendors / bidders, who commit themselves to IP with DPA, would be considered competent to participate in the bid process. Any violation would entail disqualification of the bidders and exclusion from future business dealings. IP, in respect of a particular contract should cover all phases of the contract, from the stage of Notice inviting Tender (NIT) / pre-bid stage, till the conclusion of the contract, i.e. final payment or the warranty / guarantee period. IP would be implemented through Independent External Monitor (IEM), who

are eminent persons appointed by the organization, with approval of CVC. The term of appointment for an IEM would be 3 years. Name of the IEM will be mentioned in NIT. The IEM would review independently and objectively assess, as to whether and to what extent parties have complied with their obligations under the IP. IEM would have access to all contract documents, whenever required. The bidders may raise disputes / complaints if any, with the IEM. The IEM would examine complaints received by them and give their recommendations / views to the Chairman of Port. Recommendations of IEM would be in the nature of advice and would not be legally binding.

Their role is independent in nature and the advice once tendered would not be subject to review at the request of the organization. Shri S.K.Sarkar, IAS (Retd.) and Shri Saurabh Chandra, IAS (Retd.) has been appointed IEM by DPT from 2013 to 2016. Draft condition to be incorporated in the Draft Tender papers 1) Then bidder has to execute Integrity pact agreement with Deendayal Port Authority (As per Appendix) Shri S.K.Sarkar, IAS (Retd.) and Shri Saurabh Chandra, IAS (Retd.) has been nominated as Independent External Monitor for Integrity Pact whose address is as under;

(1) Shri S.K.Sarkar, IAS (Retd.)
(Retd.)B-104, Nayantara Aptt.,
Plot No.08-B, Sec-07, Dwarka,
New Delhi – 110 075
9871322133
Mobile No. 98111 49324
Email :- sksarkar1979@gmail.com

(2) Shri Saurabh Chandra, IAS
A-9, Sector-30,
Noida (UP) 201301
Mobile No.
Email: saurabh7678@yahoo.co.in

2) The bidder has to sign and seal and upload the scanned copy of Integrity Pact form (as per agreement form enclosed) along with the technical proposal in Cover-I/Preliminary bid as a token of acceptance. Original hard copy of the same along with the tender documents shall have to be forwarded subsequently so as to reach the office of Executive Engineer (P) within 7 days of opening of the tenders failing which tender shall be considered irrelevant,

Section –IV

BILL OF QUANTITIES

PREAMBLE TO RATE SCHEDULE

4.1 GENERAL

The contractor's attention is drawn to the conditions of contract, the specifications and the drawings all of which are to be read in conjunction with the Bill of Quantities hereinafter. Directions and descriptions of work and material given in the other parts of the contract Documents are not necessarily repeated in the Bill of Quantities.

The total cost of complying with all the provisions, conditions, obligations and liabilities etc. described in the contract and of carrying out the works as specified including, but not by way of limitation, all charges and the rates and prices inserted in the Bill of Quantities hereinafter unless expressly otherwise provided for in the contract. Consequently, the contractor shall have no claim for further or extra payment in respect of any work or rates and prices set against each item are to be for full and / or described in the specification which can reasonably be inferred therefrom and are to cover the cost of provision of all labour, materials, tools, tackles, plan all as per conditions stipulated elsewhere. The rates shall also include all contingent costs and charges for proper completion of the work, whether mentioned or not, including all taxes such as Income Tax, Building & other Construction workers welfare cess and general to all the contractor's obligations under the contract and all matters and things necessary for the proper completion and maintenance of the works. The quantities given in the Bill of Quantities are estimated. The basis of payment shall be the actual quantities of work ordered and carried out as measured jointly by the contractor and by the Engineer valued at the rates and prices specified in the Bill of Quantities, where acceptable and otherwise at such may fix within the terms of the contract. The quantities of work and materials stated in the Bill of Quantities shall not be considered as limiting of extending the amount of work to be done.

The contractor is deemed to be familiar with all site conditions at the Port Site, weather, all site investigation records, available means of access and the locality of any existing services and working restrictions due to testing site features or other contractor's works in order to execute the works. General directions and descriptions of work and materials are not necessarily repeated or summarized in the Bill of Quantities. The contractor is deemed to have referred to the relevant sections of the contract documentation and prices incorporated against each item in the Bill of Quantities. The method of measurement is described in the following preambles and / or is demonstrated in the measured items included in the Bill of Quantities.

Unless separate items are measured, rates and prices must include for all testing in accordance with the specification.

The following abbreviations have been used:

PS -Provisional Sum

LS -Lump Sum

M /m -metre

M²/ m² -square metre

M³/ m³ -cubic metre

T/t /Te/ te/MT -tonne

wk -week

No. -Number

Rs. -Indian Rupee

4.2. METHOD OF MEASUREMENT & MODE OF MEASUREMENT

4.2.1. General

Unless stated or billed otherwise, quantities shall be measured in accordance with IS: 1200 and are net as they are finished shall include whatever allowance is considered by the contractor to be necessary for waste, working area, construction slopes, batters etc.

4.2.2. Units Rates prevail

In case of any arithmetical errors in the Bill of Quantities, the quoted unit rates shall prevail. Arithmetical errors will be corrected by the employer in the manner set out in the Instructions to Tenderers.

The required area shall be worked out correct up to sq.mtr. and quantity shall be worked out up to 2 places of decimals of cubic meters of all items. The length & width shall be worked out correct upto 2 places of decimals of running meter for all the measurements. However levels shall be recorded in three decimals.

4.3. PAYMENT

4.3.1. General

Payment to the contractor shall be made on the recorded measurements and the contractor will have to submit bills in the prescribed form once in a month and payment will be made ordinarily once in a month. The Port shall pay 75% of the net amount of the bill submitted within 14 days from the date of receipt of the bill and the

balance within 28 days from the date of receipt of the bill. On completion of the work or on the prior termination of the contract final measurement will be taken and account adjusted accordingly.

4.3.2 The tenderers are advised that all payments related to this subject work would be made through ECS (Electronic Clearing Service). The tenderer would be required to provide particulars of their bank account along with their bid.

The payment will be made through ECS only.

The tenderers to submit

1. Name of the Bank, Branch and full postal Address
2. Account Number
3. MICR Number
4. Type of Account
5. IFSC code number
6. Copy of PAN Card
7. TIN Number
8. Income tax PAN
9. GST

4.3.3 General

4.3.3.1 The quantities given in the Bill of Quantities are estimated and provisional and are given to provide a common basis for bidding. The basis of payment will be the actual quantities of work ordered and carried out, as measured by the Contractor and verified by the Engineer-in charge and valued at the rates and prices tendered in the priced Bill of Quantities, where applicable, and otherwise at such rates and prices as the Engineer may fix within the terms of the Contract.

4.3.3.2 The rates and prices bid in the priced Bill of Quantities except insofar as it is otherwise, provided under the Contract, include all constructional plant, labour, supervision, materials, all temporary works and false works, erection, maintenance, establishment and overhead charges, profit, foreign taxation and levies, taxes (other than GST) general risks, liabilities and obligations set out or implied in the Contract and including remedy of any defects during the Defects Liability Period.

4.3.3.3 The rates and prices shall be quoted

4.3.3.4 The rate or price rounded off to the nearest Indian Rupee shall be entered against each item in the Bill of Quantities both in figures and words, whether quantities are stated or not. The cost of items against which the Contractor has failed to enter a rate or price shall be deemed to be covered by other rates and prices entered in the Bill of Quantities.

4.3.3.5 The whole cost of complying with the provisions of the Contract shall be included in the items provided in the priced Bill of items are provided, the cost shall be deemed to be distributed among the rates and prices entered for the related itemsof work.

4.3.3.6 General directions and descriptions of work and materials are not necessarily repeated or summarized in the Bill of Quantities. References to the relevant sections of the contract documentation shall be made before entering rates or prices against each item in the Bill of Quantities.

4.3.3.7 The method of measurement of completed work for payment shall be in accordance with the requirements as stated in the individual sections of the Technical Specifications.

4.4 The Financial Offer will include the Followings:

The bidder(s) are deemed to have been taken into consideration all the tender conditions including various stipulations of MoEF &CC vide its order dated 20.11.2020. and cost of its compliance, while quoting the rates in the BOQ. In addition the rates entered in the BOQ is deemed to cover the following additional aspect;

4.4.1 Mobilizing of all equipment's including arranging all tools, equipment's and machineries required for carrying out the work specified in the schedule within the targeted date and as per description of the works stipulated in the tender.

4.4.2 Collection and analysis of data in the field, if so required by the Bidder.

4.4.3 Maintenance of all equipment's for the work during the entire period of the contract.

4.4.4 Accommodation at site or anywhere else nearby for the Bidder and his workmen.

4.4.5 Periodical hydrographic survey of the area, including providing latest sounding equipment's, preparations of charts, submission of bills of quantities as and when required and as desired by the EIC.

4.4.6 It is the responsibility of the contractor to comply with all rules and regulations in connection with the dredging contract including EC norms. The bidder is advised to take into account the environmental protection cost, to the extent applicable, while furnishing the rates in the BOQ. No additional claims in this regard shall be entertained

even at a later date.

4.4.7 Demobilization, dismantling, retrieving, carrying away from sites all tools, equipment's, machineries, temporary anchorage (if any), debris if any and accommodation etc. after completion of the work.

4.4.8 Suitable equipment's along with other required ancillaries should be arranged by the contractor. The contractors will carry out the necessary repairs, maintenance to the equipment brought by them at site at his own risk and cost. The board will not pay any charges for such repairs, replacement of parts, machineries, labors etc.

4.4.9 Dredging shall not be carried out during the fish breeding season as notified by the State Authorities.

4.4.10 As committed, Silt curtains shall be used to minimize spreading of silt plume during dredging operation. Turbidity should be monitored during the dredging using online monitoring system. No removal of silt curtain unless baseline values are achieved.

4.4.11 Dredging shall be carried out in the confined manner to reduce the impacts on marine environment.

4.4.12 The dredging schedule shall be so planned that the turbidity developed is dispersed soon enough to prevent any stress on the fish population.

4.4.13 While carrying out dredging, an independent monitoring shall be carried out through a Government Agency/Institute, by the employer at their discretion and cost, to assess the impact and necessary measures shall be taken on priority basis if any adverse impact is observed.

BILL OF QUANTITIES

“Dredging in the Navigational Channel, Kandla Creek & Alongside cargo berths/ Oil jetties at Deendayal Port Authority for the year 2024-27”

Sr. No.	Description	Quantity	Unit	Rate (INR)	Amount (INR)
1	Maintenance Dredging in Navigational channel of Deendayal Port between Buoy No. 8 to 12 (Zone-II) at minimum depth of 10.0 M below CD for a period of 3 years from commencement of the contract and disposing off the dredged material in the disposal area as shown in the drawing and as specified in sub-clause 6.23 maintenance of navigational channel during the contract period including mobilization and demobilization of all equipment, insurance costs and all other incidental expenditure arising out of or in connection with the contract, etc.	36	month		
2	Maintenance Dredging in Navigational channel of Deendayal Port between Buoy No. 4 to 8 (Zone I) at minimum depth of 10.0 m below CD for a period of 3 years from commencement of the contract and disposing off the dredged material in the disposal area as shown in the drawing and as specified in sub-clause 6.23 maintenance of navigational channel during the contract period including mobilization and demobilization of all equipment, insurance costs and all other incidental expenditure arising out of or in connection with the contract, etc.	36	month		
3	Maintenance Dredging in Navigational channel of Kandla Port between Buoy No. 2 to 4 (Zone-IA) at minimum depth of 10.0 m below CD for a period of 1 year from commencement of the contract and disposing off the dredged material in the disposal area as shown in the drawing and as specified in sub-clause 6.23 maintenance of navigational channel during the contract period including mobilization and demobilization of all equipment, insurance costs and all other incidental expenditure arising out of or in connection with the contract, etc.	12	month		
4	Maintenance Dredging in the Kandla Creek Outer to maintain a depth of 10.0 m below CD for a period of 3 years from commencement of contract as per drawing including dispose off the Dredged Material at dumping area from the Dredging area including Mobilization and Demobilizations-of all equipment, Insurance costs and all other incidental expenditure arising out of or in connection with the Contract etc.	1,50,000	Cubic meter		

	The payment shall be made on the basis of total insitu quantity dredged in the area.				
5	Maintenance Dredging in the Kandla creek Inner between North of Buoy No. 15A to proposed Oil Jetty No.8 for a period of 3 years to maintain a depth of 10.0 m below CD as per drawing including dispose off the Dredged Material at dumping area as specified including Mobilization and Demobilizations-of all equipment, Insurance costs and all other incidental expenditure arising out of or in connection with the Contract etc. The payment shall be made on the basis of total insitu quantity dredged in the area.	2,10,000	Cubic meter		
6	Maintenance Dredging at cargo berths/ Oil Jetties for a period of 3 years and disposing off the dredged material in the disposal area as shown in the drawings. The maintenance dredging is to be carried out up to the designed depths below CD from the existing depths (Table 6.2) of the specified areas during and dumping at designated dumping ground. The payment shall be made on the basis of total insitu quantity dredged in the area; however the exact quantity shall be worked out on the Joint Pre and Post Dredged Survey of the area.	9,60,000	Cubic meter		
7	Capital Dredging at OJ 9 in the berth pocket area to make available draft of 13m and alongside the jetty to achieve depth of 14.1 m below CD and capital dredging in mauevering area of OJ- 9 to achieve depth of 10.0 m below CD respectively including dispose off the Dredged Material at dumping area as specified including Mobilization and Demobilizations-of all equipment, Insurance costs and all other incidental expenditure arising out of or in connection with the Contract etc. The payment shall be made on the basis of total insitu quantity dredged in the area.	1,89,350	Cubic meter		
8	Deepening the Navigational Channel of Kandla Port between Buoy No. 2 to 1 (Zone IB) from existing depth to achieve a depth of 10.0 m below CD with side slopes of 1:5 including disposing off the Dredged Material at dumping area as specified including Mobilization and Demobilizations-of all equipment, Insurance costs and all other incidental expenditure arising out of or in connection with the Contract etc. The Payment shall be made on the basis of total insitu quantity dredged in the area.	3,73,820	Cubic meter		
9	Maintenance Dredging in Navigational channel of Kandla Port between Buoy No. 4 to 1 (including Zone IA and IB) at minimum depth of 10.0 m below CD for a period of 2 years from 13th month to 36th month of	24	month		

	the contract and disposing off the dredged material in the disposal area during the contract period including mobilization and demobilization of all equipment, insurance costs and all other incidental expenditure arising out of or in connection with the contract, etc. Note: In the event of the dredging at Zone IB (item no. 8 above) is delayed or taken over in advance from the period as mentioned in clause no. 3.7.2, the period mentioned for item no. 3 & 9 shall be varies accordingly.				
10	Salvaging of wooden logs, concrete lumps, Mixed Scrap, Iron scrap etc from sea beds in dredging including disposal of the same at designated dumping yard, which will be in distance for a lead of 2 ~ 5 km from the berths, duly clean/ wash as directed. The works also include suitable plants, equipment and labour etc, required for carrying out above Job. The quantity mentioned is tentative and vary to any extent, the payment shall be made on actual quantity salvaged.				
	a. Wooden logs of 3m to 5.0 m. length.	144	Logs		
	b. Wooden logs beyond 5.0 m up to 10.0 m. length.	125	Logs		
	c. Wooden logs beyond 10.0 m. length.	50	Logs		
	d. Concrete Lumps, RCC Blocks, CC Blocks and other cemented debris, etc.	50	Metric Tonne		
	e. Mixed Scrap such as rubber fenders, tyres, general debris	38	Metric Tonne		
	f. Iron scrap.	63	Metric Tonne		
Total amount (Excluding GST)					
<p>Note:</p> <p>1) The quoted rate shall exclude the GST component. However, the actual GST amount paid by the contractor shall be reimbursed upon production of the paid receipt/ invoice.</p> <p>2) The contract period is 36 months.</p> <p>3) The contractor has to quote the rates for all item inclusive of mobilization and demobilization charges of dredgers required to execute the work. The item of BOQ includes charges of Mobilization and Demobilizations, no separate charges will be paid for mobilization and demobilization of dredgers.</p> <p>4) The submission of Price Bid / quoted amount / indication of any financial amount along with technical bid will be considered rejected. Prices will be quoted only on (n)procure website.</p> <p>Date:</p> <p>Place:</p> <p style="text-align: right;">Signature of the Contractor</p>					

Section –V

Technical Specification

SITE INFORMATION

5.1 General

The site information is given only for the guidance of the Contractor and the Employer is not responsible for the authenticity or correctness of information or data contained therein. The Contractor shall conduct all necessary field tests to satisfy himself regarding the actual conditions at Site. No claim whatsoever will be entertained if actual conditions at Site different from those indicated herein are encountered during the execution of the works.

5.2 Location

Deendayal Port is in the district of Kachchh and located on the western bank of Kandla Creek which runs into the Gulf of Kutch at a point about 90 nautical miles from the Arabian Sea.

Situated at Latitude 22°-58' North and Longitude 70°-13' East, Deendayal Port is one of the twelve major Ports of India. It is also the first major port to be established after India became independent in 1947 from British rule. The port is located on Kandla Creek inside Gulf of Kutch as shown in the India Naval Hydrographic Chart No.203 and 2018.

The port boundaries extend over the land and the gulf waters between Lat. 22°23'36" N and 23°12'30" N, and between Long. 60°36' E and 70°38' E. Port jurisdiction over gulf waters now extends up to Vadinar, following establishment of the SBM terminal there. The land area under the disposal of the port Authority totals about 907.05 Sq.km. of which 906 Sq.km. lies in the Kandla region and only 1.05 Sq.km. lies at Vadinar area.

5.3 Infrastructure

5.3.1 Road

Kandla is connected to the national highway grid system through NH 8A coming from Ahmedabad via Wankaner and Morvi and terminates at the port. The city of Gandhidham where the port administrative office and the main staff colony are located, also lies on NH8A about 13km. from the port.

5.3.2 Railway

Western Railway reaches Kandla through Broad Gauge and directly connect the port at New Kandla with the principal cities of Mumbai, Ahmedabad, Surat,

Baroda etc., and also Delhi through a somewhat circuitous route.

5.3.3 Airway

The civil aerodrome at Kandla (Gandhidham)/ Bhuj connects the port city with the outside world. Airlines also operate daily flights through the district headquarters at Bhuj which lies 67 km. from Kandla (Gandhidham) and is connected with the port city by a State Highway.

5.4 Navigational Facilities

5.4.1 Gulf of Kutch and the Creek System

The Gulf of Kutch extends eastward from the Arabian Sea face, lying between the Kachchh and Kathiawar regions of the Gujarat State. The overall length of the Gulf is about 120 km. while its width varies and progressively reduces from about 60 km along Long. 69° E at the sea face. The almost unbroken northern shore line of the Gulf is in marked contrast against the jagged and totally broken southern coast line while both are characterized by the formation of wide mud flats getting wider as one proceeds eastward, which is indicative of large tidal fluctuations. Depths of water vary both along & across the gulf, but good depths are available almost through its length with the -10m. Contour almost reaching the Outer Tuna Buoy at Long. 70° 07'E and -6m. Contour extending right up to the Kandla Bar at the mouth of the Kandla Creek.

At the landward extremity of the Gulf lies a vast low-lying region of sand and mud flats, tidal basins and a virtual cobweb of innumerable creeks covering an area of above 1500 Sq.km. The two main creeks, viz. Kandla and Hansthal, carry the bulk of the tidal flows as also whatever upland discharges are generated during monsoons. While the Hansthal creek directly connects the Gulf with the Little Gulf of Kutch, a bay lying eastward, the Kandla Creek is also connected to this system through a somewhat circuitous route. A third important creek, the Nakti, located west of Kandla Creek has of late, degenerated into a shallow channel because of excessive siltation. On the southern coastline lies the Pathfinder inlet at Long. 69°40'E which flows as the Blunt Channel around the Kalubhar Reef and regions of Gulf past the Salaya harbour lying about 12km. west as the crow flies. The Sikka Creek also located east, about the same distance from the Pathfinder Inlet, has a jetty constituting the small Port of Sikka. These southern channels have fairly good depths ranging from 10 to 20m., though the mud flats here are substantially wider.

For further details regarding the Gulf of Kutch, one can refer to Chart No.

203 published by the N.H.O., Dehradun. Other connected admiralty charts showing the approaches to Kandla Chart No.2018 and 2059.

5.4.2 Kandla Creek

The Creek flows almost in a north-south alignment and meets the Gulf at about 70°14'E Long. It has fairly good depths and stable banks. While the width of the channel varies from 500 to 1000m. between -5m contours, depth along the shipping channel is generally around 10m. except some shallow patches where it falls to 6.2m. The slope between -5m and -10m contour is steep. During the recent times, there has been considerable siltation along the stretch of Westbank between the Bunder basin and the Oil Jetty No.1 as the 5m contour now lies about 200m away from the low water line.

5.4.3 Bars and Shoals

Near about its landward extremity, in the region of the outfall of Kandla creek, bathymetry of the Gulf is characterized by the formation of a shoaling zone. A number of shoals of varying sizes keep influencing the tidal flows in and out of the two main creeks dividing the total flow through a number of distributory channels in between them. Of these, the more important ones are the Kaladara Shoal, the Singhvi Shoal, the Mid Shoal, the Kapoor and the Baptista Shoals. These shoals are of unstable nature and keep shifting their positions over the years. The channel between the Kaladara and Singhvi shoal, long known as the mid channel is presently being used in a modified form as the ship approach route, renamed as the Sogal Channel, while the route used prior to 1984 passed below the Kaladara Shoal under the name Breach Channel. Besides these shoals, a bar also exists across the outfall of the Kandla Creek which must be dredged through in order to allow passage of ships over this area. The erstwhile shipping route along the Breach Channel passed over this bar before it had to be abandoned as the channel started deteriorating.

5.4.4 Navigation Channel

Ships approaching Kandla are received near the Outer Tuna Buoy at Lat 22°50'42"N, Long. 70° 07'E. From there they are guided through the approach channel leading to the harbour by port pilot. The channel runs between two shallow patches, viz. the Kaladara-Mid Shoal stretch and the Singhvi Shoal. It takes a sharp turn between buoy nos. 10 and 11 to align the vessel with the Kandla Creek. The total length of the Deendayal Port approach channel is about 23km., and its width at the narrowest section is near Buoy No. 8 & 8A. Navigation is permitted both during day and night, but only as per height of tide.

5.4.5 Navigational Aids

In order to facilitate day and night navigation during favourable tides, requisite aids are provided by the port authorities in the form of –

- (1) Automatic Tide Gauge
- (2) Lighted Channel Buoys
- (3) Shore Beacons
- (4) Pilot Launches
- (5) Survey Launches fitted with Echo Sounders for shallow depth sounding
- (6) VHF Communication at the Signal Station.
- (7) Diving/salvage gear
- (8) Heave-up barge for Buoy work
- (9) Tugs for attending piloting
- (10) VTS station operated from Kandla light house

It is clarified that the contractor is required to install separate tide gauge at his own cost as specified in the tender document and necessary space shall be provided by the employer for installation of the equipment.

5.4.6 Pilotage

Compulsory pilotage services are made available to vessels for both entry to and exit from the port. Port offers pilot launches to operate between the harbour and the Outer Tuna Buoy. Pilotage will be necessary during first arrival and final departure of the dredger/s. During the course of the dredging contract no Pilot will be provided, however, Pilot may be posted as and when deemed necessary by the Executive Engineer (H&D), this pilotage will be free of charge.

5.5 Harbour Facilities

5.5.1 General

The harbour inside Kandla Creek more or less extends south of the Sixteenth cargo berth to the Salt Mooring lying north of the Kandla fertilizer plant (IFFCO), over a stretch of about 6km within this stretch, the port has grown in two distinct areas, viz, Old, and New Kandla, separated by a clear distance of 1.0km. While the western bank does not have any berthing facilities. While the Old Kandla has the oil jetties located along the west bank of the Kandla Creek and the New Kandla region has all the other berthing and shore facilities for general cargo including Containers. The general layout of harbour facilities at Deendayal Port are shown in the Layout Plan of the Port DRG. NO: KPH/2019 placed in **Appendix-A**.

5.5.2 Marine Facilities

Deendayal Port has all the advantages to act as a safe heaven for ocean going vessels. Well protected from the natural disturbances caused by winds and ocean waves, the port offers good tranquil conditions for berthing and maneuvering of ships during all seasons of the year. Depths in the harbour area inside Kandla Creek are generally maintained to a minimum depth of 10m below Chart Datum so that even at the lowest stage of the tide, a vessel inside the harbour keeps floating with its full draft. The Kandla Creek being practically in the north-south alignment, vessels generally have the flood and ebb currents favourably oriented in respect of berthing / de-berthing maneuvers. There is little difficulty either from the prevailing meteorological conditions or the flood and ebb currents during tides. Further, since the bed of the creek comprises of very soft soil, there is little danger of damage to the vessel bottom even if the keel clearance is reduced to its minimum practicable value.

5.5.3 Berthing & Mooring Facilities

The port has the following berthing & mooring facilities:

- 16 General Cargo berths along a marginal quay line 3750 m. long at New Kandla
- Jetties at Old Kandla for liquid bulk cargo including P.O.L. products
- Liquid Cargo Jetty belonging to IFFCO
- 1 Barge Jetty belonging to IFFCO
- 1 Liquid Cargo Jetty belonging to IOC

- Moorings in the Kandla Creek – three for general purpose
- Single Buoy Moorings (SBM) at Vadinar serving as an off-shore oil terminal
- Product Jetties at Vadinar belonging to EOL
- 1 Pontoon jetty at new Kandla for use of port craft
- Maintenance Jetty (Floating Dry Dock)

5.6 Tides

The tides at Kandla are semi-diurnal in character. The tidal heights with respect to the Port Chart Datum is presented in Table.

Tides at Kandla (in metres)

Highest High Water Recorded	(+)9.50 (Due to cyclone on 9 th June 1998)
Mean High Water Spring	(+) 6.67
Mean High Water	(+) 6.20
Mean High Water Neap	(+) 5.71
Local Mean Sea Level	(+) 3.88
Mean Low Water Neap	(+) 1.80
Mean Low Water	(+) 1.30
Mean Low Water Spring	(+) 0.80
Datum of Soundings	0.00
Lowest Low Water level recorded	(-) 0.90 (July 2004)

The Port Survey Chart Datum is established at 3.884 m below Indian Mean Sea Level. The tides in the Kandla Creek are recorded at the Port on an automatic tide gauge. An analysis of tide gauge records for five years was carried out. Comparison of mean monthly and annual range of tides are shown in Table.

The Float observations in Approaches to Kandla during Ebb Tide are provided in DPT DWG No. 3557. Similarly, the Float observations in Approaches to Kandla during Flood Tide are provided in DPT DWG No. 3558. Both the above drawings are placed in **Appendix-A**.

Month	Mean Range in meter(2012-2015)
January	4.99
February	5.05

March	5.09
April	5.07
May	4.96
June	5.06
July	5.18
August	5.30
September	5.28
October	5.15
November	5.03
December	5.00
Annual	5.01

NOTE: For more details about the tides of Kandla, please refer to the tide table being issued annually by Deendayal Port Authority. The same are available with the office of the Dy. Conservator/ Chief Engineer, Deendayal Port Authority.

5.7 Wind

Observations on wind direction and speed are maintained at Deendayal Port observatory every day at 0830 Hrs in the morning and 1730 Hrs. in the evening. Based on the Data of wind observation during the 5 years from 2018 to 2022, the wind data are given in the Table

AVERAGE WIND SPEED IN KMPH					
YEAR					
MONTH	2018	2019	2020	2021	2022
JAN	6	6	7	7	6
FEB	6	8	6	6	6
MAR	7	8	6	7	6
APR	10	9	8	8	9
MAY	13	12	12	11	13
JUN	15	14	11	12	11
JUL	13	14	12	13	11
AUG	12	11	11	11	10
SEP	10	8	7	8	8
OCT	6	5	5	5	6
NOV	3	7	6	4	4
DEC	5	7	6	6	6
MAXIMUM WIND SPEED IN KMPH-DIRECTION					
YEAR					
MONTH	2018	2019	2020	2021	2022
JAN	18-N	20-N	22-SW	20-N	16-SW

FEB	20-ENE	24-WSW	22-SW	24-SSW	14-WSW
MAR	24-SW	08-W	28-SW	22-SW	18-SSW
APR	32-SW	28-W	24-WSW	24-WSW	20-WSW
MAY	30-SW	30-W	32-W	30-NNW	30-WSW
JUN	30-SW	34-ESE	26-SW	28-SSW	28-W
JUL	30-SW	34-SW	32-SSE	28-SW	24-SW
AUG	28-SW	24-SW	28-SSW	22-SW	22-W
SEP	24-SW	20-ENE	20-WSW	24-SE	20-W
OCT	20-SW	18-W	24-N	16-SW	14-SSW
NOV	12-SW	30-E	18-NNW	18-NNE	14-NNE
DEC	12-NNE	24-NNE	18-NNW	16-ENE	16-N

5.8 Cyclonic Storms and Depressions

Systematic recording of daily weather observations for the whole of India was started in August 1877 by the India Meteorological Department. Observations on, and description of fifty- four cyclones in the Arabian Sea between May 1848 and June 1889 are available from the records. Tracks of depressions, storms and severe storms since 1891 have been compiled and published by the IMD in their publication “Tracks of Storms and Depressions in Bay of Bengal and Arabian Sea” for the years 1877-1970 which may please be referred. Frequencies of occurrence of storms and severe storms affecting the Deendayal Port are during the same period are presented below.

Frequency of occurrence of cyclonic disturbances in the Kandla region between 1890 and 1984

Month	Depressions	Storms	Severe Storms	Total
January	Nil	Nil	Nil	Nil
February	Nil	Nil	Nil	Nil
March	Nil	Nil	Nil	Nil
April	2	Nil	2	4
May	3	2	3	8
June	10	6	6	22
July	11	3	0	14
August	4	2	0	6
September	2	6	3	11
October	3	8	6	17
November	7	4	9	20

Month	Depressions	Storms	Severe Storms	Total
December	Nil	1	0	1
Total	42	32	29	103

Source: I.M.D.

From the records it may be stated that Deendayal Port region is practically free from cyclonic disturbances. Disturbances that occur are mainly concentrated during June / July and October/ November periods. A Severe Cyclone hit Kandla during June 1998 which created extensive damage to the Port. The port receives information on formation of storms and depressions through the early warning system of the India Meteorological Department through its observations along the West coast and through other ports.

5.9 Velocity Observations

Based on Velocity observations at different tides and different locations, maximum velocities observed during spring and neap tides in the dredging area are given in Table 5.5 as observed during the month of Dec 09 to Jan. 2010

Table 5.5

Maximum observed velocities during spring and neap tides

Observation Position	Tide	Current (m/sec) (Max.) Flood / Ebb	Direction Flood / Ebb
Buoy No.12	Spring	0.95/ 1.47	041° / 178°
	Neap	0.83 / 0.91	018° / 168°
Buoy No.10	Spring	... / / ..
	Neap	0.55 / 0.75	050° / 168°
Buoy No.8A	Spring	... / / ..
	Neap	0.42 / 0.69	069° / 203°
Buoy No.8	Spring / /
	Neap	0.86 / 1.01	072° / 236°
Buoy No.9	Spring	.. / / ..
	Neap	0.79 / 0.83	072° / 232°
Buoy No.13	Spring / /
	Neap	0.86 / 0.76	013° / 151°
Buoy No.11	Spring / /
	Neap	0.72 / 0.79	051° / 165°
SPG (Near 11)	Spring / /
	Neap	0.86 / 0.70	049° / 188°

The current observations indicate that at the mouth of Kandla Creek, velocities were more or less uniform across the width. In Hansthal creek the velocity is greater on the northern side.

5.10 Soil Data:

Marine Geotechnical investigation was carried out in 2016-17. Extract from the report of March 2017 pertaining to 21 Marine Bore Logs in Kandla Creek, Navigational Channel & Oil Jetty No. 7 and their periphery are placed in the **Appendix-A(2)**. While providing the above soil data, the Employer draws the attention of the bidder to Clause 7.3.1 of Section-7: Special Conditions of Contract read in conjunction with Clause 5.26 of this Section. Hence, bidder has to make their own assessment with respect to the soil present in the areas covered under the scope of work for capital and maintenance dredging and submit the bid. Further, it is hereby clarified and categorically stated that during execution of dredging work, if any variation in the soil data provided herein vis-à-vis the dredged soil occurs; in such cases, no claim whatsoever from the contractor will be entertained by the Employer.

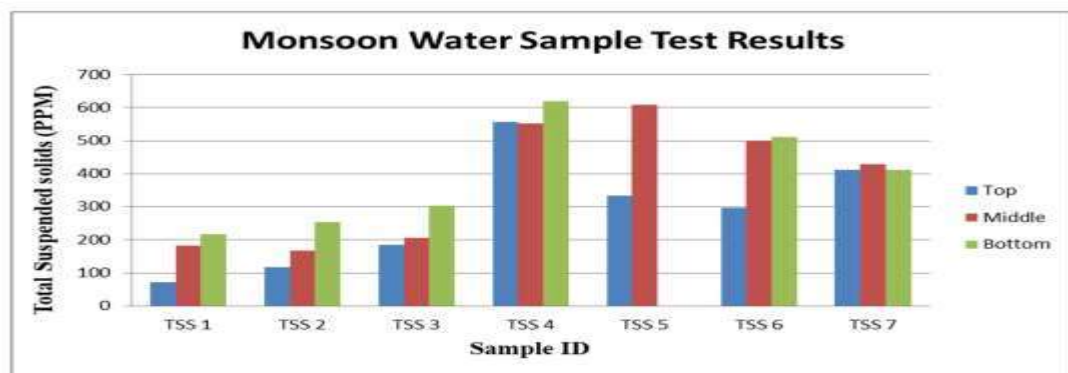
5.11 Information on Under Water Objects:

DPT had organized the study of Geophysical Investigations (GPI) like Side Scan Sonar (SSS), Sub Bottom Profiler (SBP) & Magnetometer (MMT) survey for identification of underwater objects at DPT in July 2019. The details of the locations and particulars of the underwater objects with location and other details are placed at **Appendix-A(3)**.

5.12 Silt Charge in Kandla Creek and the Navigation Channel

Water samples were collected from the different locations (TSS1 to TSS7) have been collected at the three different depth levels during high water in Kandla Creek and Navigation Channel. The details of the locations and total suspended solids are provided hereunder:

Sample Name		Location	Location of sample collected	TSS (PPM)
TSS 1	TSS1-1	22°54'2.97"N	Near surface	73
	TSS1-2	70°11'0.24"E	Mid depth	183
	TSS1-3		Close to the creek bed	217
TSS 2	TSS2-1	22°55'4.87"N	Near surface	118
	TSS2-2	70°12'40.53"E	Mid depth	168
	TSS2-3		Close to the creek bed	254
TSS 3	TSS3-1	22°56'8.47"N	Near surface	185
	TSS3-2	70°14'17.78"E	Mid depth	206
	TSS3-3		Close to the creek bed	304
TSS 4	TSS4-1	22°57'36.66"N	Near surface	556
	TSS4-2	70°14'20.62"E	Mid depth	553
	TSS4-3		Close to the creek bed	619
TSS 5	TSS5-1	23°01'31.58"N	Near surface	334
	TSS5-2	70°13'20.78"E	Mid depth	609
	TSS5-3		Close to the creek bed	N/A
TSS 6	TSS6-1	23° 2'59.52"N	Near surface	296
	TSS6-2	70°13'18.28"E	Mid depth	499
	TSS6-3		Close to the creek bed	512
TSS 7	TSS7-1	23° 3'45.63"N	Near surface	412
	TSS7-2	70°13'18.22"E	Mid depth	428
	TSS7-3		Close to the creek bed	412



From the measured TSS results, at the upstream locations, TSS7 to TSS4, the sediments are found to be distributed almost of same magnitude along the depth. As the flow takes place towards the ocean, the sediment tends to move predominantly as bed load. This is the probable reason for an increase in the dredging quantities from TSS-4 as the bottom sediment is found to be dominating although a decrease in total sediment load is observed.

5.13 Comprehensive study for the maintenance dredging requirements of Deendayal Port

Comprehensive study for the Deepening of Navigational channel to increase the draught of Navigational channel at Deendayal Port Authority including Capital & Maintenance dredging requirements covering mathematical model studies were carried out during December 2022. Based on the model studies, the estimated

maintenance dredging quantity to maintain a minimum depth of (-) 10.0m is predicted to be 8.31 Mm³/year, 9.31 Mm³/year for dredging depth of (-) 10.5 m and 9.91 Mm³/year for dredging depth of (-) 11 m for zone-1, Zone 1- A and zone-2.

5.14 Suspended Sediment Collection

Suspended sediment collection from 41 locations in the Kandla Creek and Navigation Channel during Feb 2018. Nearly four samples were collected from different depths over every location and water was collected at a depth from surface at 0.2*D, 0.6*D and 0.8*D.

5.15 Waves in the Gulf of Kutch

- (i) The Central Water and Power Research Station, Pune had collected some wave data during 1982- 84 in connection with feasibility studies carried out for the Kutch Tidal Power Project. Data were collected with the help of wave rider buoys at two locations, one near the Outer Tuna Buoy and the other near the Flamingo Flat at the mouth of Hansthal Creek. From the data collected, the maximum and the significant wave height are reproduced below in Table:

Maximum and significant wave height in Gulf of Kachchh

Date	Max. Wave Height (m)	Significant Wave Height (m)
At Hansthal Creek		
29-9-83	1.8	0.9
4-10-83	1.9	0.9
11-10-83	1.6	0.9

The port region is free from any significant wave disturbances.

- (ii) The comprehensive study for Deendayal Port has provided the following data with respect to Wave Heights in the Approaches to the port:

Wave height exceeding a specific value during an annual year

Significant wave height,	Hs Number of days exceedance
Hs < 0.5m	226
0.5m < Hs < 1.0m	86
1.0m < Hs < 1.5m	40.25
Hs > 1.5m	13.25

(iii) **Wave Climate around Outer Tuna Buoy:** Following is the data with respect to Wave Climate near Outer Tuna Buoy (OTB):

Maximum and average values of significant wave heights (m)

Month	Maximum	Average
January	0.93	0.46
February	0.44	0.11
March	0.62	0.32
April	0.69	0.31
May	1.31	0.69
June	1.87	0.93
July	1.92	1.27
August	2.27	0.95
September	1.08	0.47
October	0.57	0.27
November	0.87	0.38
December	0.85	0.39

Maximum and average values of mean wave period (s)

Month	Maximum	Average
January	3.45	2.84
February	5.09	2.86
March	3.71	2.73
April	4.29	2.85
May	4.47	3.49
June	5.25	3.94
July	5.31	4.44
August	5.86	3.99
September	4.77	3.17
October	4.21	2.65
November	3.78	2.66
December	4.10	2.74

Maximum and average values of mean wave direction (degrees from North)

Month	Maximum	Average
January	46	116

Month	Maximum	Average
February	9	226
March	14	251
April	9	260
May	16	239
June	356	234
July	61	232
August	272	235
September	18	247
October	301	232
November	43	97
December	22	114

5.16. Relative Humidity

Observed monthly maximum and minimum values of Relative Humidity for Deendayal Port

Range of monthly maximum and minimum Relative humidity in different months at Kandla

Months	Range of Max. Value	Range of Min. Value
January	87 – 83	15 – 3
February	90 – 87	18 – 0
March	98 – 91	2 – 0
April	9 – 88	36 – 13
May	92 – 6	25 – 01
June	90 – 81	3 – 25
July	99 – 83	48 – 1
August	99 – 81	50 – 39
September	93 – 81	40 – 12
October	89 – 89	11 – 01
November	95 – 89	29 – 14
December	93 – 89	11 – 09

From the above observations it may be stated that the atmosphere over the Kandla region is fairly dry and the relatively humid months are July, August and September.

5.17. Visibility

The lowest range of visibility occurs at the time of Sunrise or Sunset. Visibility in Kandla region is also affected sometimes due to dust storms.

5.18. Rainfall

The annual average rainfall at Kandla on the basis of ten years' average works out to 574.7 mm. The precipitation mainly occurs between June and September.

The variation of monthly average rainfall for the last ten years is given in Table

Monthly average rainfall at Kandla (2013-2022)

Month	Average Rainfall in mm
January	1.0
February	0.4
March	0.7
April	0.1
May	1.0
June	30.7
July	214.2
August	198.4
September	120.0
October	9.9
November	4.4
December	0.2
Annual Average	580.9

Maximum intensity of rainfall recorded is 80mm in one hour occurred in August 1981. Average number of wet days in a year is four.

From the recorded figures it may be seen that rainfall in Kandla area is very scanty. In January, February, March and April there is no rainfall at all. Rainfall sometimes occurs in May, but normally most of the annual rainfall remains confined between June and September. During the other months, rainfall is scanty and irregular. The maximum and minimum rainfalls as observed during 2006-2015 and year-wise rainfall data are given in Table 5.13 and 5.13a respectively.

Table 5.13

Maximum and minimum monthly recorded rainfall at Kandla (in mm) (2010-2019)

Months	Max.	Year	Min	Year
January	6.6	2013	0.0	Other Years
February	2.3	2013	0.0	Other Years
March	4.4	2016	0.0	Other Years

April	0.7	2013	0.0	Other Years
May	9.8	2021	0.0	Other Years
June	103.4	2013	0.0	2014
July	430.4	2017	20.5	2019
August	601.3	2020	3.9	2015
September	367.9	2021	6.9	2016
October	45	2020	0.0	Other Years
November	25.4	2019	0.0	Other Years
December	1.8	2021	0.0	Other Years

Table 5.13(a)
Year wise rain fall and rainy days (2013-2022)

Year	Rain Fall in mm.	Rainy Days
2013	1002.2	65
2014	340.7	34
2015	480.6	24
2016	223.7	37
2017	686.2	46
2018	272.5	26
2019	663.2	39
2020	931.9	60
2021	580.0	47
2022	626.4	48

5.19. Air Temperature

Maximum and minimum air temperatures are recorded at Kandla observatory and typical data for the year 1986 has been adopted. The mean values of maximum and minimum temperatures during a month have been computed and given below

Maximum and minimum monthly temperatures at Kandla

Months	Range of Max. Temp.	Mean of Max. Temp.	Range of Min. Temp.	Mean of Min. Temp.
January	27.8-23.3	25.2	16.0-9.7	13.0
February	32.1-24.1	27.5	18.0-12.0	15.5
March	34.7-29.1	32.0	22.5-18.0	20.2
April	38.6-29.4	34.6	26.0-18.5	23.5
May	41.9-32.6	35.9	28.5-23.5	25.7
June	38.6-31.1	35.0	29.5-24.8	27.7

July	34.6-26.8	32.4	28.5-24.0	25.4
August	33.1-29.1	30.7	26.5-24.4	25.4
September	40.1-31.1	33.3	25.5-23.5	24.5
October	37.2-31.6	34.2	25.7-21.0	23.1
November	37.6-25.5	32.4	24.5-14.5	20.2
December	30.5-20.6	25.6	18.2-7.8	13.5

From the above Table it may be observed that general temperature at Kandla is quite high and the hottest months are between March and October, when the mean highest daily temperature hovers around 33°C and the minimum is around 26°C. December to middle of February are comparatively cooler months.

5.20. Electric Supply

The Contractor shall make its own arrangements for all electrical supply for lighting, marking etc. and for power supply for all its floating plant and craft and shall bear all costs for the same.

5.21. Berth for Bunkering/ Maintenance

For the purpose of bunkering, repairs, maintenance, etc. the contractor will be provided necessary anchorage, mooring in Kandla creek or berth will be provided subject to availability. However, when the contractor requires an independent berth for the purpose, berth hire charges as applicable in the Scale of Rates, Deendayal Port Authority and notification thereof from time to time will be charged to the contractor. The contractor shall pay the Port dues and vessel related charges including pilotage for initial entry to Deendayal Port and departure after completion and all other dues will be exempted during the period of the contract.

5.22. Hot Work

Welding / Gas cutting / hot work on board the dredger or any floating plant / craft shall be done with the prior permission of Port Fire and Safety Officer and at such times and in locations as approved by it, subject to compliance with the conditions imposed by the Executive Engineer (H&D) and Fire-cum-Safety Officer of Deendayal Port Authority.

5.23. Labour Camp & Residential Accommodation

Contractor will not be permitted to establish its labour camp and residential accommodation for its staff on Employer's land.

5.24. Past Dredging Data

The Deendayal Port Authority have been carrying out dredging operations since its inception. Past records indicate the tendency of the ship channel shifting from time to time. The past details of the alignment of the navigational channel and the dredging data are available with the Executive Engineer (H&D), Deendayal Port Authority. The present Sogal Channel was opened during 1984 and has been in continuous use since then. This channel also has a tendency to shift from time to time. The dredging data of the present contract for 2021-24 is presented is furnished below in Table 5.16(a) and Table 5.16(b):

Table 5.16(a)

Details of Equipment used for dredging during the period from April 2021 to March 2024

S. no.	Name of Dredger	Type of Dredger
1.	Shanthi Sagar 18	Trailing Suction Hopper Dredger
2.	Shanthi Sagar 4	Trailing Suction Hopper Dredger

In addition to above, the marine spread - Grab Dredger, Dumb Hopper Barge, Tug and Survey Boat were also deployed.

Table 5.16(b)

Dredging details in the Navigational Channel during the period from April 2021 to May 2022

Month	Zone I		Zone II		Zone IA		Total	
	No. of loads	Qty	No. of loads	Qty	No. of loads	Qty	No. of loads	Quantity
Apr-21	44	307320	121	739273	2	12458	167	1059051
May-21	8	18593	58	199027	1	2459	67	220079
Jun-21	32	114080	139	674412	77	207910	248	996402
Jul-21	14	75634	123	587855	10	55438	147	718927
Aug-21	9	50870	108	492978	8	43696	125	587544
Sep-21	10	50458	92	388993	17	76806	119	516257
Oct-21	8	39967	103	448024	31	148722	142	636713
Nov-21	59	202749	84	357891	53	143275	196	703915
Dec-21	12	59169	111	482767	26	121785	149	663721
Jan-22	22	107430	90	372955	22	101843	134	582228
Feb-22	14	65029	79	344455	13	66499	106	475983
Mar-22	25	127489	80	349379	16	72819	121	549687
Apr-22	13	64545	94	392529	17	83011	124	540085
May-22	11	44418	101	414473	12	43463	124	502354
Jun-22	13	57284	91	380895	10	43900	114	482079

Jul-22	5	21997	40	333949	5	20777	50	376723
Aug-22	12	62214	85	330258	9	43687	106	436159
Sep-22	16	87527	83	362616	14	74327	113	524470
Oct-22	10	51205	94	411045	10	46363	114	508613
Nov-22	6	25226	66	277955	6	26552	78	329733
Dec-22	11	47476	65	268879	6	26552	82	342907
Jan-23	7	30184	59	245003	7	30756	73	305943
Feb-23	9	39972	70	293607	7	30338	86	363917
Mar-23	11	46479	74	307278	6	35024	91	388781
Apr-23	8	34200	72	298817	5	37389	85	370406
May-23	10	42948	74	310785	4	17431	88	371164
Jun-23	3	12794	61	258428	3	12596	67	283818
Jul-23	11	45557	102	422161	9	38132	122	505850
Aug-23	6	25133	78	309194	7	28626	91	362953
Sep-23	4	16586	67	269183	4	17075	75	302844
Grand Total	408	1971038	2608	11357314	426	1653408	3442	14981760

5.25. Shipping Operations

The Shipping operations are carried out round the clock taking advantage of the tide. The traffic handled and the number of shipping movements at the Deendayal Port for the 10 years is shown in Table 5.17:

Table 5.17
Data relating to traffic handled and shipping movements

S. No.	Year	Traffic Handled in million tonnes	No. of Ships Calling at Kandla
1	2004-05	41.54	1957
2	2005-06	45.91	2124
3	2006-07	52.98	2318
4	2007-08	64.92	2598
5	2008-09	72.22	2517
6	2009-10	79.50	2776
7	2010-11	81.88	2692
8	2011-12	82.50	2714
9	2012-13	93.62	2734
10	2013-14	87.01	2304
11	2014-15	92.497	2216
12	2015-16	100.05	2513
13	2016-17	105.44	2568
14	2017-18	110.10	2747

15	2018-19	115.40	2903
16	2019-20	122.61	3095
17	2020-21	117.57	3047
18	2021-22	127.10	3141
19	2022-23	137.56	3315

5.26. Disclaimer

The information furnished above are indicative and without any commitment on the part of employer. It is for the Contractor to make its own assessment and satisfy itself on the various aspects of technical, geographical, commercial aspects etc. before submitting their bid. No Claim whatsoever in this regard will be entertained by the Employer.

Section –VI

Specification of Dredging work

SECTION-6

SPECIFICATION OF DREDGING WORK

6.1 Standards

Save as otherwise specified in the Contract the relevant provisions of the appropriate Bureau of Indian Standards shall apply for workmanship. Where relevant BIS Standards do not exist, the latest version of the relevant British Standards Specification or Standard of the American Society for testing shall be applied. Equivalent standards from other countries may be used provided they are demonstrated to be equal to or more onerous than the standard quoted above. The following abbreviations are used when referring to Standards.

BIS	:	Bureau of Indian Standards
BS	:	British Standard Specification
CP	:	British Standard Code of Practice
ASTM	:	Standard of American Society of Testing Materials
AASHTO	:	Standard of American Association of State Highway Officials
NEN	:	Dutch Standards

The Dredging shall be carried out generally as per BS: 6349 British Standard Code of Practice for Marine Structures – Part – 5 (1991), Code of Practice for Dredging and Land Reclamation and US Army Corps of Engineers (1984) Shore Protection Manual.

6.2 Scope and Nature of Work

Deendayal Port is situated along the west bank of Kandla Creek in Kachchh District on the west coast of India. The creek flows almost in a north south direction and has fairly good depths and stable banks. Over the region at the outfall of Kandla creek, bathymetry of the Gulf is characterized by the formation of the shoaling zones. The ships approaching Deendayal Port are received near the outer Tuna Buoy and from there they are guided through the approach channel leading to the Deendayal Port. The total length of the Deendayal Port approach channel is about 23km. and its narrowest section is near Buoy No. 8 & 8A. There are in all 19 Nos. of Channel Marking Buoys from the Outer Tuna Buoy to the beginning of the Kandla Creek. The shallowest section in the present approach channel is between buoy No. 8 to 12.

The proposed dredging Work involves carrying out the capital/maintenance dredging in the navigational channel, Kandla creek and berth pockets at Deendayal Port and to continuously maintain the required depths at navigational channel and berth pockets as specified in Clause No. 6.23. It is also to be clearly understood that while maintaining the navigational channel as per Clause no. 6.23,

the Contractor has to maintain the depths and width already achieved in the navigational channel. The work also includes capital / maintenance dredging in front of cargo berths, oil jetties No. 1 to 8, maintenance jetty, zero panel, Bunder Basin, Flotilla Jetty, proposed capital dredging at Oil Jetty No. 9, SNA jetty and in the Kandla Creek-Outer and Kandla Creek-Inner, navigational channel (Zone II, I, IA, IB). The Dredging work shall also involve removal of sand, silt, clay, and admixtures thereof.

Maintenance dredging between Buoy no. 1 to 2 (Zone IB), Buoy No. 2 to 4 (Zone I A), Buoy No. 4 to 8 (Zone-I) and 8 to 12 (Zone-II) and disposing off the dredged material in the disposal area East of OTB as shown in the drawings and as specified in sub-clause 6.23 including mobilization and demobilization of all equipment, insurance costs and all other incidental expenditure arising out of or in connection with the contract, etc.

Dredging and removal of capital dredging quantity in approach channel and berth pocket of the proposed OJ 9 to achieve a depth of 14.1 m below CD from existing depths and disposing off the dredged material in the disposal area East of OTB as shown in the drawings. The payment shall be made on the basis of total in-situ quantity dredged in the area; however, the exact quantity shall be worked out on the quadruplicate/ quintuplicate pre-dredged and post dredged survey of the area as specified in sub-clause 6.23. The work includes mobilization and demobilization of all equipment, insurance costs and all other incidental expenditure arising out of or in connection with the contract, etc.

The maintenance dredging alongside Cargo Berths, Zero Panel, Tug/ flotilla jetty, Maintenance Jetty, SNA jetty and Bunder Basin by suitable equipment (such as Grab /Grab Hopper / Backhoe Dredger and their hopper barge / tug) includes achieving and maintaining the depths as specified in **Table 6.2** and disposing off the dredged material in the disposal area as shown in the drawing. In the case of maintenance dredging at Oil Jetties Nos. 1 to 8 and capital dredging at proposed Oil Jetty No. 9, it is to be carried out predominantly by a Trailer Suction Hopper Dredger and material to be disposed at the designated dumping ground as shown in drawing. However, in case a grab dredger / backhoe dredger / any other suitable equipment is deployed for dredging near the berth face, such dredged material is to be disposed at the designated dumping ground as indicated by Engineer-in-charge.

It is likely that under water obstructions might be encountered within the various dredging areas. No idle time charges or loss of production shall be paid to contractor in the event of any obstruction being encountered, which obstructs the operation of the dredger. If, however, during the execution of the works the contractor encountered physical obstructions or physical conditions, other than climatic conditions on the site, which obstructions or conditions were, in his opinion,

not foreseeable by an experienced contractor, the Contractor shall forthwith give notice thereof to the Engineer, with a copy to the Employer. On receipt of such notice the Engineer shall, if in his opinion such obstructions or conditions could not have been reasonably foreseen by an experienced contractor, after due consultation with the Employer and the Contractor, determine, and shall notify the Contractor accordingly, with a copy to the Employer. Such determination shall take account of any instruction, which the Engineer may issue to the contractor in connection therewith, and any proper and reasonable measures acceptable to the Engineer, which the Contractor may take in the absence of specific instructions from the Engineer.

The cost of removal of such underwater objects shall be paid at the rate quoted by the contractor under **item 10 of BOQ**. Any underwater object/objects retrieved will become the property of the port.

6.3 Drawings / Charts / Documents

The drawings / charts / documents forming part of the contract are attached as **Appendix A**.

6.4 Programme

6.4.1 General

In view of the limited width of the channel and the number of ships transiting through the channel Trailing Suction Hopper Dredgers should be deployed by the Contractor as far as possible. The past dredging history indicates that whenever dredgers are withdrawn for drydocking repairs etc. there is a tendency of the channel silting up and also shifting.

The Contractor therefore has to ensure that at no point of time the depths deteriorate to less than the pre dredging depth or the depths already achieved by the Contractor, due to any reasons whatsoever including withdrawal of dredger for routine maintenance, machinery breakdown, etc.

The main trailer suction hopper dredger of minimum 7400 cu. m capacity (original/ equivalent substitute) shall be available throughout the contract period. In case of breakdown / dry docking / major repairs to the main dredger; substitution shall be allowed as per Clause 6.4.2. However, the Contractor has to submit proof of dry dock / afloat repair facility booked at the time of submitting permission to sail/ replace the main dredger. The contractor shall ensure that the deployments of Contractor's equipment including dredgers and dredging operations in the channel are carried out in such a manner that the shipping operations are not affected. For removal of any doubt it is clarified that the shipping movements will take priority over dredging work and the contractor shall be deemed to have considered the same while submitting its bid.

Notwithstanding the requirements for submission of method of work statement as part of the tender, the Contractor shall submit details of working methods, including details of Contractor's Equipment, survey and positioning equipment, etc. to be deployed to the Engineer within 25 days from the date of issue of Letter of Acceptance.

A detailed plan shall include, type of equipment proposed, including details of performance, working method and sequencing of dredging works.

The dredging methods shall be such as to ensure that no damage is caused to marine structures/floating buoys in the vicinity of the dredging area/Dumping area.

Approval of the Contractor's work plan will only be given after the Contractor has demonstrated to the satisfaction of the Engineer that minimum requirements of the specifications can be met. Dredging operations shall not commence until this approval has been obtained in writing from the Engineer.

The contractor is required to deploy a maximum of two Trailing Suction Hopper Dredger(s) of total capacity not less than 10,000 cu. m out of which one TSHD should be of minimum 7400 cu. m. hopper capacity in dredging areas of Navigational Channel. However, Contractor has to deploy additional dredgers for capital and maintenance dredging as per the tender and requirement. Further, it shall be the sole responsibility of the contractor to assess on his own, the requirement of dredgers to meet the actual site requirements. In case if any additional dredgers / hopper capacity is required to maintain the assured depths in the navigational channel, same shall be deployed at no such extra cost to be quoted in the bid price.

Dredger shall adhere to minimum following efficiency parameters:

- (a) It shall be fitted with twin screw propulsion and with bow thrusters.
- (b) The Load and Draft Indicators with print facility, to be inspected and certified by a Classification Society being a member of IACS. The certificate issue date shall be within a years' period or the certificate is to be renewed annually.
- (c) It shall have efficient Dredge position control monitoring system consisting of DGPS with RTK, necessary software capable of being loaded with survey data like Hypack or PDS 2000 software.
- (d) It shall have density meters for dredge mixture and efficient de-hoppering /de-watering system.
- (e) It shall have preferably two suction pipes capable of dredging upto a depth of 20 meters.
- (f) It shall have the capability to produce jet pressure of 6 Kg / Sq. Cm. for maintenance dredging and 10 Kg/ Sq.Cm for capital dredging work.
- (g) It shall have the capability to maintain a speed of at least 8 knots.
- (h) It shall have the capability to maintain a minimum speed to complete the work within the stipulated period of time.

The contractor is required to deploy suitable equipment (such as Grab /Grab Hopper / Backhoe Dredger and their hopper barge / tug) for the capital and maintenance dredging alongside berths. The above dredger and ancillary equipment such as hopper barges and tugs have to be deployed as per the availability of the berths and shall remain at site from 1st October to 30th April every year during the 3-year period of the contract. The contractor will not be eligible for claiming for any delay due to unavailability of berths.

The achievements and maintenance of depths and widths as required in the tender conditions are the responsibility of the contractor.

The Contractor is responsible for maintaining the depths along various berths, as specified under Part B of BOQ, for the entire duration of contract period. The contractor shall carryout repeated maintenance dredging alongside berths, if found necessary for maintaining the specified depths. Monthly quadruplicate survey shall be carried out along berths for assessing the extent of siltation. The Engineer shall decide on the requirement of maintenance dredging for a particular month based on the monthly survey data and the same shall be approved by the Employer.

6.4.2 Mobilization

The period of mobilization for trailer suction hopper dredger(s) and other equipment shall be 30 days from the date of issue of Letter of Acceptance. The contractor shall mobilize all the survey and positioning equipment including survey launch within 25 days and complete all the survey work including data collection, processing and final product chart within 30 days from the date of issue of Letter of Acceptance. In the Event of delay on the part of Contractor in the deployment of the dredgers within 30 days and commencement of dredging operation on 31st day from the date of issue of Letter of Acceptance, the contractor shall be liable to pay a sum of Rs. 1,500,000/- per day for the first five days of delay Rs. 2,000,000/- p er day for the next ten days of delay to the employer.

In case of further delay, the Contract may be rescinded by the Employer. In case the Contract is rescinded, the Performance Guarantee Bond or the Security Deposit shall be forfeited, and Contract may be awarded to any one of the bidder whose bid was otherwise in accordance with the Tender and who is ready and willing to execute the work at the rates quoted by it at the option of the Employer. Provided however that in such an event the Contractor shall be liable to pay the difference between the Contract Price which the Employer would have paid to the Contractor and which the Employer would be required to pay to another Contractor. However, even if the Contract is not rescinded, the sum payable by the Contractor for the delay beyond 15 days will also be at the rate not less than Rs.2,000,000/- per day.

The main trailer suction hopper dredger of minimum 7400 cu. m capacity (original/ equivalent substitute) shall be available throughout the contract period. In case of breakdown / dry docking / major repairs to the main dredger; substitution shall be

allowed as per Clause 6.4.2. However, the Contractor has to submit proof of dry dock / afloat repair facility booked at the time of submitting permission to sail/ replace the main dredger.

Continuous non-deployment of main dredger on site for more than 7 days shall require a substitution of the dredger equivalent to the performance parameter of the main dredger. In case of failure to substitute the main dredger with maximum number of two dredgers within a period of ten days (including seven days mentioned above), it shall call for penalty of Indian Rupees 1,500,000/- per day for the first ten days of delay and Indian Rupees 2,000,000/- per day for the next twenty days of delay to the Employer. The above penalty will be on pro-rata basis for the difference in dredger capacity. In case of continuous non-deployment of main dredger for more than 30 days, the Contractor shall substitute the main dredger with a single dredger equivalent to the performance parameters of the main dredger and also resume the total dredger capacity deployed before the withdrawal of the main dredger, failing to do which the Employer reserves the right to call for termination of the contract as per the applicable Clauses. Shortfall penalty and other penalties will also be applicable during the period, as per the tender conditions.

6.5 Traffic

The Contractor shall at all times observe and comply with all laws including regulations relating to navigation, maneuvering, and anchoring of its floating craft throughout the Works. The Contractor shall follow instruction in this regard given by the Employer/ Engineer. The Contractor shall carry out its/his work strictly in a manner which shall not obstruct or endanger the normal use of waterways, anchorages, wharves and approaches thereto, whether in the possession of the Employer, or any other persons. The priority of navigation within the port limits shall always be at the discretion of the Employer and the Employer will not be responsible for any inconvenience, loss or delays caused to or suffered by the Contractor due to the priority not being given to its floating craft by the Employer and no claims shall be entertained for any inconvenience caused, loss suffered or due to delays occurring because of such restriction.

6.6 Tidal Working

The Contractor shall be deemed to have taken in to account or allowed in its programme and the amount quoted in the Bill of Quantities for loss of time and/or revenue due to tidal working or for all delays due to weather conditions including wave action/lack of flotation, etc. of Contractor's Equipment including Dredger and in his programme and the amount quoted in the Bill of Quantities.

6.7 Marker Buoys etc.

The Contractor shall, at its own expense, install and maintain marker buoys, if required to define the extent of the works as may be directed by the Engineer or other competent authority. All beacons and markers for setting out the works or for defining the limits of the permitted working areas shall be of such size as shall be clearly visible at all times and lights with approved day marks and lighting characteristics shall be fitted if necessary or required by the appropriate authority. The contractor may place a Marker Buoy to indicate the dumping ground, if necessary.

6.8 Contractor's Responsibility for Materials, Labour and Equipment

The Contractor shall be responsible for the provision of all materials, stores, equipment and craft necessary for the satisfactory execution and completion of the dredging work and surveys for measurements. The Contractor shall employ competent persons with adequate qualifications and experience in dredging to take charge of and maintain in good working order all dredgers, tugs and other craft employed on the Works. The Contractor shall also collect samples of dredged materials at intervals directed by the Engineer and get the same tested for chemical and physical properties including specific gravity, bulk density and grain size distribution at approved laboratories at their own cost.

The Contractor shall extend full co-operation and facilities required to the employer to carry out monitoring / research of the dredging process from time to time free of cost.

During execution of the work, the Employer may engage / depute PMC, third party inspection agency or any other Government authorized agencies in matters related to monitoring of dredging activity. The Contractor is bound to extend all cooperation and share data with such authorized agencies. Any costs towards collection of samples and related testing of material shall be borne by the Contractor. The results of such tests are binding on the Contractor. In this regard, it is clarified that the Employer will not entertain any claim whatsoever from the Contractor.

6.9 Survey

The Contractor shall at its cost charges/expense perform and carry out necessary survey Work required to be executed and maintained by it as provided in the contract and as directed by the Engineer. The Contractor shall for this purpose provide /engage and employ air-conditioned launch personnel, services, equipment and supplies needed to perform the surveys and all the incidental work required to be done in connection with such surveys including but not limited to:

- Setting out;
- Registration of water levels;

- Pre-dredging surveys and charts;
- Interim surveys and charts;
- Post dredging surveys and charts;
- Field measurements and processing of data;

Field measurements and processing of data shall be executed to a degree of accuracy in both the horizontal and vertical plane and drawn to scales to the full satisfaction of the Engineer/Engineer-in-charge. The Contractor shall be responsible for the accuracy of the setting out of the works.

Soundings shall be taken across the cross sections of 50m intervals along the channel with depth along the cross section of 25m intervals or such other spacing as the Employer may direct. Soundings shall be taken rounded off to the nearest meters and decimeters.

The Contractor shall establish tide gauges at suitable places, as approved by the Employer, and the said area shall be adequately illuminated. The Contractor shall be responsible for marking and providing the buoys at the dumping areas. All survey charts to be prepared by the Contractor indicating the depths shall be reduced to Chart Datum (CD), and the depths and / or heights shall be plotted in meters and decimeters. The survey charts shall be submitted to the Engineer on a CD and also on a film along with five printed copies. Data generated by the surveys shall be elaborated in accordance with sound topographic and hydrographic practices and be presented on survey charts of the Site on a scale and format to be agreed upon by the Engineer. All survey lines shall be shown on the charts with plot intervals along the lines not exceeding twenty-five meters with intermediate plots, if necessary.

Furthermore, the survey chart shall incorporate all reference points, buoys, beacons, markers, gauges and benchmarks, together with the location and nature of obstructions, structures and facilities. Particular items of interest shall also be indicated on such charts. The Contractor shall also provide and maintain at his own cost, survey stations and buoys which it may require to carry out the survey and shall remove them on completion of the works.

Deendayal Port Authority will not be able to provide the survey launch and the contractor shall arrange the survey launch at its own cost. The costs of providing electronic positioning system, Hydrographic Survey software PDS2000/Hypack, survey launch, survey equipment, consumables and crew and carrying out all surveys and setting out, etc., and preparation of all record drawings for the purpose of the execution of the Contract, shall be/are deemed to be included in the rates and prices indicated in the Bill of Quantities.

6.9.1 Topographic Surveys

The Contractor will be permitted to use onshore established survey triangulation stations for triangulation surveys, leveling surveys or for checking purposes under the following conditions:

- that no station is damaged in any way;
- that any marks, flags or equipment required by the Contractor shall be placed adjacent to or directly above (if possible) the permanent mark in a position approved by the Engineer; and
- that the Contractor shall be responsible for establishing the true position and level of any mark, flag or equipment placed by him in relation to the permanent station.

Details of the position of permanent survey triangulation stations shall be supplied by the Engineer-in-charge on request. Any further survey triangulation stations required by the Contractor shall be established by the Contractor at its own expense. All the survey processing, plotting etc. shall be automated survey system with necessary checks including manual verification as may be required. All the survey data collected shall be made available to the Engineers for verification before such survey is finally accepted by him.

6.9.2 Hydrographic Surveys

Hydrographic surveys / Chart processing works shall be performed with the Software PDS2000/Hypack by using dual frequency echo sounding equipment (ODOM MK III or equivalent) and an electronic positioning system (DGPS or equivalent) with an accuracy which ensures that the requirements of the contract are achieved. The survey launch, survey equipment's, automated survey system software PDS2000/Hypack shall be approved by the Engineer before being brought to Site. The Contractor shall provide one desktop and one laptop with similar configuration (software and hardware) to the Employer for the duration of the contract, for evaluation and monitoring of the work. Contractor shall install and maintain a suitable automatic tide gauge with transmitter and receiver facility at an approved location close to the works. The Contractor shall at its own expense, provide, install, operate and maintain an approved Electronic Positioning System (DGPS) which shall fully cover the Site, including dumping areas etc. and shall be continuously operational throughout the Contract period. The system shall consist of ship-borne receivers on the dredgers and the survey launch, distance measuring units, the requisite number of shore stations, interfaces, track plotters, integrated automatic data handling and storage facilities and sufficient spares to enable uninterrupted operations of the system. Echo sounders/ equipment shall be capable of logging data compatible with the computers apart from the facility of producing charts. The system shall be installed, tested and set to work for continuous operation during all dredging and survey operations. Once operational, the system shall remain in continuous operation

until the post-dredge survey is completed and the final survey and as-built drawings have been signed and accepted by the Engineer. In the event of the failure of the Electronic Positioning System or if the same is found inaccurate by the Engineer, the Engineer may permit use of an approved temporary back-up system till the Electronic Positioning System is replaced or is again operational or the accuracy has been rectified and in such an event at its sole discretion order that the affected Works or part be surveyed again after the system is replaced or is again operational or rectified. No extension of time for completion shall be granted by the Engineer to the Contractor on account of discontinuity in the Electronic Positioning System. Any expenditure incurred by the Contractor on account of this shall be deemed to be included in the rates and prices quoted by the Contractor and shall not be paid for separately. The Electronic Positioning System shall at all times maintain a repeatable

accuracy in horizontal direction of plus or minus 1m for any point within the Site. At the beginning and at the end of each day's soundings, the Bar check and positioning check shall be carried out to ensure the accuracy of the echo soundings as well as the positioning system and the result may be given to the Engineer along with the survey data. It is clarified that PDS 2000/ Hypack Software can be used for carrying out the hydrographic survey works.

To facilitate survey monitoring in the port at various locations towards safe navigation & berthing of vessels, the Employer reserves the right to requisition the services of the Contractor's survey launch with survey equipment and survey personnel for a maximum period of two days during every fortnight. The employer's survey personnel shall be present onboard the survey launch and direct the contractor's survey personnel.

6.10 Survey Launch /Sounding Equipment Etc.

The contractor shall at its own cost provide and operate to the satisfaction of the Engineer an all-weather seaworthy air-conditioned survey launch complete with gear suitable for surveying and site investigation during the currency of the contract. The launch shall be of air-conditioned steel hull construction with a draft of around 1.5 m. It should have a maximum speed of 8/10 knots with excellent control and maneuverability at survey speeds. While sounding the speed of vessel should be kept between 5-6 knots for the quality logging of the data. It should have a panoramic view from the wheel house. The survey launch shall be equipped with a dual frequency Echo Sounder type, preferably ODOM MK III or equivalent including interfacing, heave compensator etc. capable of digital display and also recording on dry thermal paper, with sufficient number of spare parts and consumables. The wheelhouse should have sufficient space to accommodate and conveniently operate the survey equipment's. The size of launch shall be such that it can accommodate about 8 people while being used for transportation. It shall also have a minimum deck space of 3m by 5m and shall be equipped with safety gear as per the Indian Mercantile Act.

6.11 Survey Personnel, etc.

The Contractor shall, at its own cost charges and expense, engage well qualified, experienced and competent hydrographic surveyors to carry out all the necessary surveys, measurements and setting out of the works. The names, qualifications, and experience of such surveyors shall be submitted to the Engineer for his approval before they are engaged or deployed for the survey. The Contractor shall, for the purpose of checking the survey and setting out, provide to the Engineer all the assistance which he may require. The Surveyor shall be selected having appropriate experience, and as far as possible, the same surveyor shall be provided throughout the Contract Period. Before commencing any survey work or setting out, the Contractor shall give the Engineer not less than two days written notice of its intention to survey or to set out or to take soundings for any part of the works in order that arrangements may be made for checking. The Contractor shall provide for the sole use of the Engineer and Engineer's Representatives, all necessary survey instruments and other equipment and all technicians, labour and attendants which the Engineer may require for checking the setting out and soundings. The Contractor shall maintain in good working order at all times, during the period of the Contract, the instruments and equipment provided by it. The Contractor shall provide at its own expense, any poles, staging's, templates, or profiles required by the Engineer for checking or measuring the works. Working shall be suspended for such times as necessary for checking the lines and levels of any part of the works, at no extra cost to the Employer.

6.12 Calibration of Equipment

The Contractor shall make suitable provisions for calibration of all survey and dredge monitoring equipment's including but not limited to Electronic Positioning System, Echo Sounder including the tide gauge and DLM and Volume Measurement Equipment, Track Plotter, etc. whenever directed by the Engineer.

6.12.1 Guidelines for pre and post dredging surveys

Various methodologies exist for the collection, processing and presentation of hydrographic survey Information. Whilst the presentation of such information is largely determined by the end user, the fundamentals of hydrographic data collection remain the same involving accurate measurement of the depth of water above a stated datum and the position of this measured depth, The conduct of survey operations when it comes to pre and post dredging requirement needs planning with few important aspects which are brought out in detail in succeeding paragraphs.

6.12.2 Survey Preparation and Planning

Survey preparation includes the planning of hydrographic task and ancillary activities which are necessary to support the collection of data which Includes activity such as equipment calibrations, setting up of monitoring station, carrying out check leveling etc.

6.12.3 Equipment Calibrations

Equipment calibrations need to be conducted at regular intervals and documented in order to support the quality estimate given to the final survey data set.

(a) **SBES Calibration.** Calibration of SBES is to be achieved by the bar checkmethod.

(b) **MBES Calibrations.** Frequent check-calibrations or rigorous confidence checks are required at regular intervals (which can be as frequent as 1-2 weeks) and after significant component swap outs of key sensors.

(c) **Tide Gauge Calibrations.** It is good practice to confirm automatic gauge readings with the level of the tide observed on a co-located tide pole, referenced to Chart Datum, at least weekly, if not daily, during survey operations. These comparisons provide a valuable record of the gauge performance and should be retained.

(d) **Miscellaneous Checks and Calibrations.** Regular confidence checks of the vessel positioning system should be conducted at least weekly, preferably daily, during the course of a survey. A static check of the vessel's derived position against a mark ashore (e.g. a pin on a wharf) established to a higher order of accuracy is recommended. Calibration of ancillary equipment e.g. SoundVelocity probes, should be carried out by the equipment manufacturer and latest check certificates verified.

6.12.4 Scale of Survey

All pre-dredging surveys are to be carried out on largest possible scale.

6.12.5 Horizontal Datum

Hydrographic surveys to be carried out based on WGS-84 datum using UTM as a grid.

6.12.6 Vertical Control

The following is to be borne in mind while establishing vertical control for the survey:

- (a) Tide to be referred to preferably to a SOI benchmark and all depths to be reduced to Chart Datum.
- (b) Tide to be observed for the entire duration of-survey and no predicted tide is to be applied.
- (c) Period of observation of tide should be between 5 - 10 minutes, depending on range of tide.
- (d) The data collected is to be invariably compared with predicted tides to rule out gross errors.
- (e) Check levelling is to be carried out in case of established gauge from Bench Mark to Tide Pole/ATG.

6.12.7 Data Analysis

Data collected during survey operations should be monitored closely to ensure the required standard and the desired extent of coverage is being met; however, it is not possible to fully assess the overall quality until all data can be viewed together or in suitably sized blocks. Crossline comparisons and various other consistency checks are undertaken at this time. Statistical analysis tool, where available are to be used for data validation and quality assurance. Areas requiring re-running, either because of gaps in coverage or due to suspect data, are identified at this stage.

Sounding Accuracy: The Total Vertical Uncertainty (TVU) will be as given for special order surveys enumerated in SP-44.

$TVU = \sqrt{a^2 + (b \times d)^2}$, where $a = 0.06$ and $b = 0.0075$ and d being the depth measured.

Statistical evidence for quality assurance viz. the main line vs. cross line comparison at 95% confidence level and depth bias verses beam angle in case of multibeam are to be resorted to provide for quality check and quality assurance. This will provide for a check on data consistency and acceptance, prior volume computations.

Points to be Considered: Following points needs to be considered during conduct of survey:

- (a) It is important that the limitations of the survey equipment in use are fully considered during sounding operations. In particular, the performance of motion sensor equipment to be carefully monitored and survey operations suspended when it is apparent that the equipment is not coping with existing sea condition. This is particularly important in MBES operations where error tolerances are much smaller.
- (b) Sea condition: Survey operation should be ideally carried out in calm seas. In case of any swell motion sensor to be utilized and interfaced with echosounder

in order to compensate for roll/pitch.

- (c) Preferably higher frequency in range 200-220 KHz to be used for single beam echo sounder.
- (d) The frequency should not vary between pre and post dredging surveys.
- (e) Sound Velocity to be observed each day and in case of multibeam observation should be done with every change of tide. SV to be observed and applied with special care while in estuarine waters to cater for temporal/spatial variation.

6.12.8 Volume Computation

In order to calculate volumes in dredging surveys, the methodology would be determined by following factors:

- (a) Technique of Sounding i.e. Single Beam or Multi Beam.
- (b) Nature of seabed i.e. smooth (sand or mud), harsh (rocky).
- (c) Shape of the channel i.e. vertical walls. The volume will be computed considering the depths up to the toe-lines on either side of the channel and the horizontal tolerance will be nil. Similarly, the volume will be computed up to design depth only.

Based on above factors, one of the following methodologies in any hydrographic software may be adopted:

(a) TIN Volumes: Triangulated Irregular Network (TIN) Volumes are based on the true positions of depths to calculate the volume of a surface. This calculation involves modelling the surface as a collection of small planes. TIN's can either be derived from a gridded bathymetry source i.e. surface) or from a point cloud. One advantage in using the TIN method (particularly for point data) is that the true position of the source depths will be utilized in the volume calculation. Entire sounding data within the area in question can be considered. This is the historically preferred method for most dredging type applications where volume is critical.

(b) Hyperbolic Volumes: For this method, a hyperbolic cell is created from the centres of every four adjacent grid cells. The depths from the grid cells are used as the depths for the corners of the hyperbolic cell. For this calculation, the surface is modelled as a collection of hyperbolic paraboloid sections, with a hyperbolic paraboloid created to smoothly pass through the points of each hyperbolic cell. This gives a smooth approximation of the surface and good volume results but is processing intensive and time consuming.

(c) Rectangular: In this method, a single depth value from each cell (or bin) in

the surface is used to calculate the volume. The surface is modelled as a collection of disjointed rectangular prisms, with the depth for each grid cell becoming the depth of the prism. In comparison to the previous hyperbolic method, this results in a much more 'simple' volume calculation which is processed much faster, however the accuracy of the computed volume may not be as reliable. One limitation on the rectangular volume method is the inability to perform a volume calculation against a sloped or non-horizontal surface in a reference model (for example the bank of a channel). This is because by definition, a rectangular prism cannot have a sloped edge, so only horizontal reference surfaces are supported.

Volume Comparisons. As previously outlined, there are a number of different methods available to the Hydrographic Surveyor or Engineer for volume determination. Depending on the technology available to conduct the survey, different methods may be adopted to calculate and derive the volumes, but one approach may produce a more realistic solution. If the user only has access to a single beam echo sounder, they will be limited to end area volumes and TIN volumes. For a full density multibeam survey, rectangular and hyperbolic volumes can also be taken into consideration.

The nature of the seafloor (or riverbed/reservoir) could be another factor in determining the most suitable volume method to be used. If the bottom topography is smooth (such as with sand), hyperbolic volumes, which produce a smooth estimate of the terrain using constructed hyperbolic paraboloids could yield the best results. For a harsher, rocky terrain, TIN volumes utilizing the true positions of each depth may be the most robust answer. It's necessary to test and validate the possible solutions on a number of data sets to assess their merit.

Prior to arriving as the dredged volume adequate attention is to be paid vis-à-vis provision on the contract in terms of over dredge allowance permissible and other factor that would have a bearing on dredged volume to be computed.

6.13 Data from Surveys:

All raw data on recording paper and matt Film or CD/USB of echo sounder data and tide gauge recorded data shall become property of the Employer after the surveys and drawings have been completed.

6.14 Breakdown of Positioning System:

The Contractor shall inform the Engineer forthwith of any breakdown, or irregularities in Electronic Positioning System.

The Contractor shall not be entitled to extension of time for delay incurred in the dredging or maintenance operations or it shall be entitled to any amount due to

malfunctioning of the Electronic Positioning system.

6.15 Monitoring of the Dredging Process

The Contractor shall for the purpose of ensuring that the Work is executed as per schedule and with a view to control and verification of operations, ensure continuous monitoring and recording of the dredging process. The Contractor shall provide at its own expense, the electronic dredger positioning and control systems including necessary instrumentation, sensors, calibration, data storage and displays and shall ensure the continuous operations thereof. The Contractor shall daily make available to the Engineer the data collected by the Contractor fully decoded and processed, and the same shall at all times be open for inspection by the Engineer or his representatives. The Contractor shall allow the Engineer or his representative to check the data/ dredging process onboard on request/ whenever required.

The Contractor shall provide/submit the DLM prints, track plot charts to the engineer everyday showing the areas where dredging operations are carried out including the areas where dredged material is disposed of. All data and evaluation thereof made available by the Contractor to the Employer shall remain in the custody of the Employer.

To facilitate day to day monitoring of the dredging work and hydrographic survey and other related works, the contractor shall provide two four-wheeler vehicles (Bolero / Sumo / Innova or equivalent) for use by the Employer and their representatives with drivers available during execution period on all days including Sundays and holidays. The vehicles must be in good condition with a commercial permit and third part insurance. If vehicle is not provided, penalty of Rs 5000/ per day per vehicle shall be recovered. The required fuel / maintenance to be borne by the contractor. The above vehicle will be used for dredging related work only. The rate quoted by the bidder shall be inclusive of the above service.

The contractor shall at his own expense provide 1 qualified engineer & 1 qualified Executive(Administration and Finance) personals to work at DPA's office for looking after the day to day works during the entire period of contract.

6.16 Deposition of Dredged Soil

All the soil and other dredged material excavated by the Contractor under this Contract shall be deemed to be the property of the Employer and deemed to belongs to the Employer and shall be disposed of only in such manner as directed by the Employer. The dredged material from the proposed dredging work shall be disposed at the specified disposal grounds as explained below:

(a) The dredged material by trailer suction hopper dredger from the maintenance dredging of Navigational channel, Kandla Creek and Oil Jetties 1 to 4 and Oil Jetty No. 7 to 8 shall be disposed at the designated dumping ground East of OTB within 1 km radius of the location at (i) Latitude 22° 51' N and Longitude 70° 10' E and (ii) Latitude 22.8376 N and Longitude 70.187 E (as per CWPRS Report)

(b) The dredged material from Maintenance dredging near the berth face of Oil Jetty nos.1 to 4 and Oil Jetty no. 7 to 8 whenever carried out by a Grab / Grab hopper / Backhoe dredger / any other suitable equipment, the dredged material shall be disposed of near Phang Creek within 150 m radius of the location of the location at Latitude 23 04' 28" N and Longitude 70 13' 28" E.

(c) The dredged material from the dredging by Grab / Grab Hopper/ Backhoe dredger / any other suitable equipment at Cargo Jetties, SNA Jetty, Zero Panel, Maintenance Jetty, Bunder Area and Kandla Creek shall be disposed within 150 m radius of the location at Latitude 22 56' 31" N and Longitude 70 13' 00" E (in the inshore channel).

Note: All the coordinates given in this tender are WGS 84 Coordinates System.

The position of the designated dumping ground at sub-clause 6.16 (a) above East of OTB for the trailer suction hopper dredger is the present position and indicative in nature and subject to variation as per physical conditions and morphological changes. Therefore, the Employer/Engineer reserves the right to relocate the above dumping ground to any other location approximately within the distances of 3 Kms of the Southern boundary of the above dumping grounds. Any change in the location of the dumping site shall not entitle the Contractor to make any claim against the employer either for extra time or money. The contractor shall systematically dump the material in various dump boxes in the designated dumping area so that the material is well distributed in the entire dumping area and disperses. The contractor has to carry out periodical surveys in the dumping area and monitor the quantity of material dumped vis-à-vis the reduction in the reduced depths at the dumping area. The Contractor shall ensure that no soil is dumped beyond or outside the dumping areas. In the event it is noticed by or brought to the notice of the Engineer or Engineer-in-charge or Engineer's Representatives that the contractor is dumping the dredged material at places other than designated areas specified by the Engineer, the Contractor shall be liable to pay an amount of Indian Rupees. 500,000/- per load and the same shall be recovered from the amount due to the contractor.

The material to be dredged in the channel shall be disposed of at the dumping ground at the location shown in the survey chart enclosed.

6.17 Pre-dredging Survey

Before starting dredging operation, the Contractor shall at its cost charges and expenses carry out a quadruplicate/quintuplicate joint survey of the seabed, in the presence of the Employer/Engineer and a third independent outside agency to be nominated by the Employer. In case the new dredging contract work has been awarded to other dredging company other than the present dredging contractor, four/five party joint survey shall be conducted for both pre/post dredging surveys. (i.e. consisting the present contractor, new contractor, third independent survey agency, Engineer and the

Employer) The present dredging contractor has to make suitable arrangements for such 4/5 party joint pre/post surveys at its own cost and expenditure. The Engineer/ representative of Engineer shall always accompany with all the surveys and his signature is to be obtained on the processed survey charts along with all the other parties involved in the survey. The level of the seabed shall be recorded by means of echo sounding equipment selecting both the frequencies of 33KHz and 210KHz, simultaneously. However, for payment purpose the level of seabed based on pre dredging and post dredging survey results of echo sounding frequency 210 KHz only shall be considered. The Contractor shall supply all necessary equipment personnel for carrying out such surveys. The equipment shall be calibrated in the presence of the Engineer/ representative of Engineer before and after carrying out soundings. All the levels shall be reduced to Chart Datum. On completion of the surveys the Contractor shall prepare record drawings to show the surface levels of the seabed. The required number of copies of these drawings shall be signed by the Contractor and the Employer and to be given to the Engineer.

6.18 Interim Surveys

The Contractor shall carry out Joint surveys of the works at monthly intervals or at such intervals as may be decided by the Engineer. The method of sounding shall be same as adopted for the pre-dredging survey. **However, the Third Party Govt. survey agency shall not be involved in Fortnightly surveys/check surveys** (i.e. the representatives of Contractor, Employer's and PMC Personnel). However, fortnightly surveys shall be carried out by using Multi beam/ single beam echo sounding as decided by Engineer-in-charge to check the progress of the work.

On completion of each interim survey, the Contractor shall prepare record drawings showing surface levels of seabed reduced to Chart Datum. The required number of copies of these drawings shall be signed by the Contractor and the Employer and to be given to the Engineer.

If the monthly survey as per Clause 6.18 and the fortnightly survey as per Clause 6.23.1 fall on common dates no separate monthly survey will be required, and fortnightly survey will be taken jointly and considered as monthly survey.

6.19 Tolerance for Dredging

The dredging shall be carried out to the designated levels shown on the drawings and as specified in Clause 6.23.3 or such modified levels as may be notified by the Employer to the Contractor in writing.

The vertical tolerance will be 0.10 m below design depth for the maintenance dredging. Vertical tolerance up to 0.10 m below design depth is permitted for capital dredging component of the work. There is no horizontal tolerance allowed. However, no payment will be made for the over dredging done beyond the design depth.

6.20 Final Survey to Determine Levels after Dredging

On the completion of Work, the Contractor shall give notice to the Employer/Engineer of its intention of carrying out the Final Survey. The Contractor shall at its cost charges and expenses carry out a quadruplicate joint survey of the seabed, in the presence of the Employer/Engineer and a third independent outside Govt. survey agency to be nominated by the Employer. On completion of each Final Survey, the Contractor shall prepare record drawings showing surface levels of seabed reduced to Chart Datum based on the depths obtained with the sounding frequency of 210 KHz. The required number of copies of these drawings shall be signed by the Contractor, independent outside Govt. survey agency and the Employer and to be submitted to the Engineer.

In case of handing over final hydrographic survey, four/ five party joint survey i.e. quadruplicate/ quintuplicate survey shall be conducted consisting of the present contractor, Employer, Engineer, third independent Govt. survey agency and representative of new contractor. Accordingly, the final handing over H.S. Chart is to be prepared and submitted with four/ five party signatures. This enables the employer in avoiding dispute of variation in quantities left over by the existing contractor and accepting the same by the new Contractor.

The present dredging contractor has to make suitable arrangements for such 4 party/ 5 party joint pre/post surveys at its own cost and expenditure.

6.21 No Payment for Over-dredging

Contractor shall not be entitled to any payment in respect of any additional depth and width dredged by the Contractor (over dredging) beyond the targets given in Clause 6.23.3 of this tender document for Zone IA & IB, Zone I & Zone II and the design depth for other dredging locations.

6.22 Survey of Disposal Grounds

Before starting the Work (pre dredging), during the execution of Work (interim survey) and on completion of Work (final survey), the Contractor shall at its cost, charges and expenses also carry out the survey of site where the dredged material is to be dumped in the same manner as pre dredging or interim or final survey of area to be dredged. During the currency of the Contract, the Contractor shall periodically carry out survey of the offshore disposal grounds as indicated by the Engineer as specified for pre-dredging survey detailed in Clause 6.17 above. The cost of carrying out such surveys shall be deemed to be included in the unit rates for dredging quoted by the Contractor.

6.23 Measurement for Payment

6.23.1 Soundings:

The Contractor shall maintain the dredged channel to the specified depth and width. During every fortnight and every month throughout the contract period the quadruplicate joint soundings shall be carried out in Zone-IA (between buoy Nos. 2 to 4), Zone-I (between buoy Nos. 4 to 8) and Zone-II (between buoy Nos. 8 to 12) to know the width and depth of the area involved for dredging using frequencies 33 kHz and 210 kHz simultaneously or any other method approved by the Engineer. However, the depths obtained from the frequency of 210 KHz shall be considered for payment purpose based on pre and post dredging surveys. Such echo sounders/ equipment shall be capable of logging data by using the Hydrographic Survey Software PDS2000/Hypack for producing charts. Sounding shall be taken at cross sections of 50m interval along the channel. Soundings across the channel shall not be at a distance of more than 25 m. Sounding charts shall be acceptable for payment only if it shows at least 99% of theoretical grid points readings, a sounding chart, which does not contain reading of at least 99% reading of the theoretical grid points as above, shall not be accepted. It is to be specifically noted that the remaining 1% grid points where readings are missing shall not be located in one area. They shall be scattered in different grids. Under no circumstances the allowance of 1% provided herein shall be construed as the Employer/ Engineer waving their right or releasing the Contractor of its obligation under the Contract or that dredging is not required to be done in those 1% of the area. Provided however, if the 1% grids remain along the center line of the navigational channel, the survey chart will not be accepted and the Contractor shall forthwith carry out the dredging in those grids and in any event achieve the target depth and submit the resurvey chart for payment purpose on or before the next periodical sounding.

A joint quadruplicate (i.e. representatives of the Employer, Engineer, Contractor and an outside Govt. survey agency as the third party) survey shall be carried out before the dredging work is started and the Contractor shall submit the copies of charts having the soundings to the Engineer/Engineer in charge before the dredging work is started. Similarly, a joint quadruplicate post dredging survey shall also be taken at the time of taking over and completion of work and during each month for releasing the running account bills. Five copies of each of the charts and drawings shall be submitted by Contractor to the Engineer within three days of the survey conducted. The 4th party/5th party surveyors participating in the survey shall be nominated by the Employer at its own cost from any reputed Government Agency who has adequate knowledge and experience in the field of Hydrographic Survey. In case the contractor fails to carry out the survey or furnish the charts to the Engineer within three days after the survey, the employer will be constrained to get these works done by other agencies or by other means and the cost incurred therein shall be recovered from the contractor.

Further, to facilitate safe navigation of ships to Cargo Berths Nos. 11 to 16, the Contractor shall also carry out every month throughout the contract period the joint

soundings (as directed by the Engineer) in the priority patch areas of Kandla Creek-Outer.

6.23.2 Grid Points

Grid points are the locations where soundings are to be taken for the purpose of preparing the sounding charts. The location of the grid lines shall be determined in such a way that they are at an interval not more than 50m along the longitudinal direction of the channel. The points on the grid line across shall be not more than 25m apart. Thus, the grid points on the cross section shall be at 25m interval, the starting grid point shall be at the edge of the channel. From the above grid locations, the total number of grid points where soundings are to be taken shall be calculated and taken as 'G', the total number of theoretical grid points, for computing the missing soundings in any chart submitted by the Contractor. However, the charts should contain two extra soundings on the same intervals on either side beyond the channel limits along all the specified cross sections.

6.23.3 Target Depth, Widths & Length in the Navigational Channel:

The Contractor during the Contract Period is expected to achieve the width & depth of the channel as mentioned below. For this purpose, the portion of the channel where the dredging is to be carried out is to be divided into **Four** zones as indicated below;

Table 6.1:

Estimation of Tentative Quantity of Siltation in Zone IA, Zone I and Zone II of Navigation Channel for Maintenance Dredging under Depth Guarantee:

S. No.	Area	Width to be Achieved & Maintained in m	Depth below Chart Datum to be Maintained in m	Length of the Channel In m	Tentative Quantity in Million cu.m
1.	Zone II (Between Buoy No. 8 to 12) for a period of 3 years	350	10	4800	9.95
2.	Zone I (Between BuoyNo. 4 to 8) for a period of 3 years	300	10	4100	6.01
3.	Zone IA (Between Buoy No. 2 to 4) for a period of 1 year	300	10	2250	0.91
4.	Zone IA (2250m) & IB (4170m) (Between Buoy No. 4 and 1) for a period of 2 years	300	10	6420	2.93
	TOTAL				19.80

6.23.4 Deleted

6.23.5 Payment Schedule

6.23.5.1 Maintenance dredging as per item no. 1 & 2 of BOQ

The payment for depth guaranteed maintenance dredging shall be made monthly to the contractor based on quadruplicate at the rate quoted by them for item no 1 & 2 of BOQ for maintaining the existing depth and width. The maintenance dredging for the 36- month period is based on maintaining the guaranteed depth of 10.0 m below CD. The employer shall release the above monthly payments after recovery of the amount, if any, as per Clause 6.23.6 and other the conditions of the Contract.

During the course of the contract, if it is not possible to carry out monthly survey due to bad weather conditions / other reasons due to extraordinary events or circumstance beyond human control such as an event described as act of God (such as a natural calamity) or the quadruplicate survey chart results technically found not realistic/ satisfactory, for which the Contractor has to obtain a certificate in writing from the engineer-in-charge and the amount payable for that particular month will be $\frac{2}{3}$ rd of the amount due for that particular month. The balance $\frac{1}{3}$ rd amount will be paid whenever the contractor submits the result of a satisfactory survey carried out thereafter, subject to Clause No. 6.23.6.

6.23.5.2 Maintenance dredging as per item no. 3 of BOQ

The payment for depth guaranteed maintenance dredging shall be made monthly to the contractor based on quadruplicate at the rate quoted by them for item no 3 of BOQ for maintaining the existing depth and width. The maintenance dredging for the 12- month period is based on maintaining the guaranteed depth of 10.0 m below CD. The employer shall release the above monthly payments after recovery of the amount, if any, as per Clause 6.23.6 and other the conditions of the Contract.

During the course of the contract, if it is not possible to carry out monthly survey due to bad weather conditions / other reasons due to extraordinary events or circumstance beyond human control such as an event described as act of God (such as a natural calamity) or the quadruplicate survey chart results technically found not realistic/ satisfactory, for which the Contractor has to obtain a certificate in writing from the engineer-in-charge and the amount payable for that particular month will be $\frac{2}{3}$ rd of the amount due for that particular month. The balance $\frac{1}{3}$ rd amount will be paid whenever the contractor submits the result of a satisfactory survey carried out thereafter, subject to Clause No. 6.23.6.

6.23.5.3 Maintenance dredging as per item no. 4, 5 & 6 of BOQ

The payment for dredging against Item No 4, 5 & 6 of BOQ shall be made on the actual in-situ quantity removed by contractor based on quadruplicate survey at the rate quoted by them for the above items respectively of BOQ. The actual quantity shall be worked out from pre-dredged, interim and post dredged survey work and volume shall be computed by Survey software generated TIN model-based volume/ Simpson's Rule calculation or any other approved method as approved by the Engineer. The employer shall release the above monthly payments after recovery of the amount, if any, as per the conditions of the Contract.

(Note: If required, Maintenance dredging at proposed Oil Jetty No.09 -berth pocket and its approach will be carried out after completing the capital dredging on as and when required basis/ as per the instruction of employer under tender item No.06 of BoQ)

6.23.5.4 Capital Dredging as per item no. 7 of BoQ

The capital dredging for deepening to be carried out in proposed OJ 9 berth pocket and its approaches and the target depth and width to be achieved as mentioned in the drawings. The payment for dredging for item no 7 of BOQ shall be made on the actual in-situ quantity removed by contractor based on the quadruplicate survey at the rate quoted by them for the above items respectively of BOQ. The actual quantity shall be worked out from pre-dredge, interim and post dredge survey work and volume shall be computed by survey software generated TIN model-based volume calculation or any other approved method as approved by the Engineer. The employer shall release the above monthly payments after recovery of the amount, if any, as per the conditions of the Contract.

6.23.5.5 Dredging as per item no. 8 of BoQ

Dredging the Navigational channel of Deendayal Port from buoy no. 2 to 1 (Zone IB) from the existing level to 10m BCD. The payment for dredging for item no 8 of BOQ shall be made on the actual in-situ quantity removed by contractor based on the quadruplicate survey at the rate quoted by them for the above items respectively of BOQ. The actual quantity shall be worked out from pre-dredge, interim and post dredge survey work and volume shall be computed by survey software generated TIN model-based volume calculation or any other approved method as approved by the Engineer. The employer shall release the above monthly payments after recovery of the amount, if any, as per the conditions of the Contract.

If the contractor completes the deepening as per Items Nos. 8 of BOQ earlier than the target period of 6 months; the following will be applicable:

(a) Upon achieving 10 m below CD at navigational channel from buoy no. 2 to 1 (Zone IB), the contractor shall submit in writing to the Engineer that the target depth of 10 m below CD has been achieved in entire length and width of the respective Zones / area described above.

(b) The Employer shall consider the above submission and organize a joint quadruplicate hydrographic survey in the above mentioned Zone of the navigational channel. If the hydrographic survey establishes that the target depth has been achieved in the above mentioned Zone, the Engineer In-Charge shall certify the same in writing.

(c) the Employer will implement payment against **Items No. 9** of the BOQ as per **Clause 6.23.5.6** and payment against BoQ for item no. 8 will cease.

(d) No other incentive / claim whatsoever from the contractor will be entertained by the Employer for early completion of the deepening at navigational channel from buoy no. 2 to 1 (Zone IB).

(f) However, in case of non-maintenance of 10 m depth below CD, during subsequent months after achieving the depth of 10 m below CD, relevant recoveries as per Clause No. 6.23.6 shall be applicable.

6.23.5.6 Maintenance dredging as per item no. 9 of BOQ

The payment for depth guaranteed maintenance dredging shall be made monthly to the contractor based on quadruplicate at the rate quoted by them for item no 9, of BOQ for maintaining the existing depth and width. The maintenance dredging for the 24- month period is based on maintaining the guaranteed depth of 10.0 m below CD. The employer shall release the above monthly payments after recovery of the amount, if any, as per Clause 6.23.6 and other the conditions of the Contract.

During the course of the contract, if it is not possible to carry out monthly survey due to bad weather conditions / other reasons due to extraordinary events or circumstance beyond human control such as an event described as act of God (such as a natural calamity) or the quadruplicate survey chart results technically found not realistic/ satisfactory, for which the Contractor has to obtain a certificate in writing from the engineer-in-charge and the amount payable for that particular month will be 2/3rd of the amount due for that particular month. The balance 1/3rd amount will be paid whenever the contractor submits the result of a satisfactory survey carried out thereafter, subject to Clause No. 6.23.6.

6.23.5.7 Salvage work – Item No. 10 of BoQ

It is likely that under water obstructions like concrete lumps, iron scrap, mixed scraps etc. might be present within the Port limits while carrying out the dredging operations. No idle time charges or loss of production shall be paid to contractor in the event of any obstruction being encountered, which obstructs the operation of the dredger.

The contractor is required to deploy suitable equipment/dredger (such as TSHD/CSD/ Grab /Grab Hopper / Backhoe Dredger and their hopper barge / tug) for the carrying out the capital dredging alongside berths under Item no. 7 of the BoQ. In case any other suitable equipment other than a grab dredger / backhoe dredger is deployed for dredging in front of the berths; the Contractor has to deploy a suitable equipment to execute the salvage work in the above areas under Item **no. 10 of BoQ** at no extra cost to the Employer.

The work includes under this item, salvaging of concrete lumps, Iron scrap, mixed scrap, rubber fenders tyres etc. from seabed in dredging operations including disposal of the same at designated dumping yard duly clean/ wash as directed by Engineer-in-charge.

The works also include suitable plants, equipment's and labor etc, required for carrying out above Job. The quantity mentioned is tentative and vary to any extent, the payment shall be made on actual quantity salvaged by the contractor at the rate quoted by the contractor as per Bill of Quantities.

6.23.5.8 Layout Drawings / Charts:

The general layout drawings for dredging in navigational channel and berths/jetties of Deendayal Port is shown in attached as **Appendix A**.

Table 6.2
Depth and slopes for Maintenance dredging

S. No.	Location	Design Depth (below CD)	Side slope
1	Cargo Berth -1 to 5	11	Natural slope up to 1: 3
2	Cargo Berth -6 to 10	12.5	Natural slope up to 1: 3
3	Cargo Berth -11 to 16	14.1	Natural slope up to 1: 3
4	Tug / Flotilla Jetty	6	Natural slope up to 1: 3
5	Oil Jetty No.1 and 3	11.8	Natural slope up to 1: 5
6	Oil Jetty No. 2 and 4	11.5	Natural slope up to 1: 5
7	Oil Jetty No. 7, 8 and 9	14.1	Natural slope up to 1: 5

8	Zero Panel	4	Natural slope up to 1: 3
9	Bunder Basin	0	Natural slope up to 1: 3

Table 6.3
Depth and slopes for Capital dredging

S. No.	Dredging area	Depth to be achieved below C. D	Side slope
1	Proposed Oil Jetty no.9	14.10 m	Natural slope up to 1: 5
2	SNA Jetty	6 m	Natural slope up to 1: 3

The above dredging areas at Sl. No. 1 to 9 of Table 6.2 will be handed over in part to contractor to execute the dredging work as per the priority and availability of vacant berths/ jetties by Employer. No idle time charges shall be paid on account of non- availability of vacant berths/ jetties.

In event of non-completion of quantities of item No. 07 & 8 of BOQ by contractor in time period specified as per clause no. 3.7.2 (C) (i) & (ii) the liquidate damage shall be applicable as per the clause 3.7.2 (d) of general condition of contract.

6.23.6 Compensation for not maintaining the target depths and widths

As per joint quadruplicate pre-survey sounding chart shows ruling shortfall is nil or predetermined. The successful bidder should maintain minimum depth 10m BCD of channel for maintenance dredging under guarantee depths and widths.

The dredging shall be carried out in such a way that the depths should not fall down below the pre dredging soundings and the same shall be maintained as per table 6.1

Ruling shortfall statement shall be applicable from the 2nd RA Bill onwards for item nos. 1, 2 & 3 of BOQ and from the 2nd month bill onwards for item no. 9 of BOQ.

The contractor shall carry out maintenance dredging in **Zone-II, Zone-I & Zone-IA and Zone 1B (from Buoy no. 2 to 1)** to maintain the required depths/widths as indicated in the tender documents failing which the recovery of amount from the bills of the contractor for ruling shortfall in depths shall be made as per clause no. 6.23.6 from 2nd Month of the date of commencement of the proposed maintenance

dredging work for the item nos. 1, 2, 3 & 9.

For any reason whatsoever if the contractor is not able to maintain the required depth and width in the channel to the required depth and width in **Zone-II, Zone-I Zone-IA and Zone 1B (from Buoy no. 2 to 1)** as specified in Clauses 6.23.3, the Employer shall be entitled to recover from the Contractor for such non-performance/failure an amount not exceeding the amount calculated on the basis for the non-performance based on the higher ruling short fall value determined on the basis of the joint Quadruplicate monthly soundings taken by the Contractor as provided in the Contract.

Table 6.4
Penalty Terms for Ruling Shortfall in Depth

Ruling shortfall in depth (in metres)	Penalty as percentage of the Total monthly amount quoted by the contractor for Item No. 1 to 3 & 9 of maintenance dredging in BoQ for every month of existence of non- performance / failure in Zone – IA, Zone – I, Zone-II & Zone IB
0.2	10%
0.3	15%
0.4	20%
0.5	25%
0.6	30%
0.7	35%
0.8	40%
0.9	45%
1	50%

Shortfall: -

Recovery of shortfall will be considered as a specified depth of 10.0 m below CD minus actual depths available in each of the Zones, i.e. Zone IA (Buoy No. 2 to 4), Zone-I (Buoy Nos. 4 to 8), Zone- II (Buoy No. 8 to 12) and Zone IB (buoy no. 1 to 2). If the sounding depths available are more than the specified depths of 10.0 m below CD in the channel it will be considered by restricting to the specified design depth of 10.0 m below CD for calculating the short fall in depth.

Note:- In case regular monthly bill survey (which shall be carried out at 30± 4 day interval) could not be conducted in any month(s), due to bad weather or any other reasons in any areas of Zone IA, Zone I, Zone II and Zone IB, the recovery for such month(s) will be made, at the same percentage of shortfall in depth, in succeeding month, in which monthly bill surveys is conducted. However, recovery for the shortfall in depth, in which monthly bill survey is carried out, will also be made.

The soundings will be rounded off to 0.1 m. The fraction of soundings / values less than 0.05 will be rounded down and the fraction of soundings / values equal to or greater than 0.05 will be rounded up. The shortfall shall be determined as per the following formula:-

Ruling shortfall is the shortfall value such that the number of shortfall values including the grid points where soundings are missing which exceeds this value shall be 1% of the total number of shortfall values of all soundings in the channel.

An example for calculation of Ruling shortfall is furnished as under:

Total number of grid points	N	= 1000
Total number of grid points where the soundings missing in the channel		= 2

Ruling Shortfall shall be

$\{[(N/100)+1] - \text{the number of grid points where soundings are missing in the channel}\}^{\text{th}} \text{ value} = 1000/100+1-2 = 9^{\text{th}}$

For example, following are the shortfall values (i.e. 10.0 m- actual depth as per the quadruplicate monthly survey chart) in the descending order.

- 1st grid point 2.5 m
- 2nd grid point 2.2 m.
- 3rd grid point 2.1 m.
- 4th grid point 1.9 m.
- 5th grid point 1.6 m.
- 6th grid point 1.2 m.
- 7th grid point 1.0 m.
- 8th grid point 0.8 m.
- 9th grid point 0.6 m.**
- 10th grid point 0.3 m.
- 11th grid point 0.2 m.
- 12th grid point 0.1 m.

i.e. from the above, the ruling shortfall will be 0.6 m. and the employer shall recover the compensation for the ruling shortfall as per the percentage shown in the tender document. Above shortfall soundings is not allowed 10 m either side.

In case the contractor has not achieved the depth of 10.0m below CD within 100 m width on either side of the center line of the channel from 2nd RA Bill, the monthly bill / chart shall not be accepted by the employer and the contractor has to achieve the depths within 15 days and resubmit the monthly bill along with the resurveyed chart of the respective zone.

The recovery of every month ruling short falls if any is applicable from the 2nd RA bill to 35th month or up to pre-final payment in case of any extension granted by the

employer. However, the recovery of 36th month or final month will be applicable as under.

At the end of the contract period, the contractor has to hand over the dredging area to the employer with the width and depth as specified under clause number 6.23.3 failing which penalty for the left-over quantity shall be made at Rs 300/- per cu. m, based on the final quadruplicate / quintuplicate survey result. The recovery will be in lieu of the penalty recoverable for shortfall due at the time of the final survey to be conducted at the end of the 36th month.

Note-1: The grids where sounding is missing will be recorded first in the descending order table, meaning that the shortfall values corresponding to these grids are considered to be higher than the highest short fall value of the soundings taken. If the ruling shortfall in depths exceeds more than 1.0 m the contractor shall be given one month notice to improve the depths failing which the employer may terminate the contract and the balance pending work may be executed by the employer at the risk and cost of the contractor

6.24 Mobilization of Additional Equipment

The target widths and depths to be achieved have been specified. In case the Contractor is not able to achieve these targets with the dredgers already deployed for the work, the Contractor at his option or if called upon by the Engineer shall mobilize an additional Dredger so that the Contractor is able to achieve the target. The conditions stipulated in clause no. 1.1.1.c of section 1, shall also be read in conjunction with this provision.

The additional dredger to be provided shall be at the cost /charges and expenses of the Contractor and the cost for the same shall be deemed to have been taken into account in the price quoted by the Contractor. For deployment of any such additional equipment, no claim whatsoever will be entertained by the Employer.

6.25 Acceptance

The Contractor shall notify the Employer in writing, when it considers the Works as completed. Within fifteen days of receipt of such notice, the Employer/Engineer shall survey the areas jointly with the Contractor in the presence of the Employer and a third independent outside agency to be nominated by the Employer. The dredging work shall not be considered as complete nor shall the same be taken over by the Employer until confirmed by a survey that the seabed is dredged to specified levels and profiles.

6.26 Access to Works, Plants, etc.:

The Employer or his representatives shall have at all times access to the Contractor's Equipment and the Contractor shall provide necessary water transport facilities at its own cost for them from the waterfront to the Site.

6.27 Inspection

A launch shall be made available at site for the Employer or for their authorized representative to access the dredger and for inspection of the Works in progress.

Section –VII

Special conditions of contract

SECTION-7

SPECIAL CONDITIONS OF CONTRACT

7.1 GENERAL

7.1.1 Special Conditions shall be read in conjunction with the General Conditions of Contract, specification, Drawings and any other documents forming part of this contract wherever the context so requires.

7.1.2 Notwithstanding the sub-division of the documents in to these separate section and volume every part of each shall be deemed to be supplementary to and complementary of every other part and shall be read with and into the Contract so far as it may be practicable to do so.

7.1.3 Where any portion of the general Conditions of Contract is repugnant to or at variance with any provisions of the Special Conditions, the provisions of the Special Conditions shall be deemed to over-ride the provisions of the General Conditions of Contract and shall to be extent of such repugnancy of variations, prevail.

7.1.4 Where it is mentioned in the Specification that the contractor shall perform certain work or provide certain facilities, it is understood that the contractor shall do so at his own cost.

7.1.5 The materials, design and workmanship shall satisfy the relevant Indian standard, the specification conditioned herein, and codes referred to. Where the specifications stipulate requirement in addition to those contained in the Standard codes and specifications these additional requirements shall also be satisfied.

7.2 THE WORK

7.2.1 Scope of Work

The scope of work is defined in the technical specifications. The contractor shall provide all necessary materials equipment and labour etc. For the execution of the work till completion. Prior Approval of the EIC is required for the use of the materials before it is used.

7.2.2 Nature of Work

The works under the contract comprise the dredging of sand, silt, clay and

admixture of the same from within the Kandla Creek of the Deendayal port and dispose of the dredged material into the designated locations at sea as per drawing.

7.2.3 Duties of the Engineer's Representative

The Engineer's Representative is a person appointed by the Engineer. The Engineer's Representative is responsible to the Engineer and shall carry out such duties and exercise such authority as may be delegated to the Engineer's Representative by the Engineer.

7.2.4 Engineer's Authority to Delegate

The Engineer may from time to time delegate to the Engineer's Representative any of the duties and authorities vested in the Engineer and he may at any time revoke such delegation. Any such delegation or revocation shall be in writing. Any communication given by the Engineer's Representative to the Contractor in accordance with such delegation shall have the same effect provided that:

- (a) any failure of the Engineer's Representative to disapprove any work, materials or Plant shall not prejudice the authority of the Engineer to disapprove such work, materials or Plant and to give instructions for the rectification thereof.
- (b) if the Contractor questions any communication of the Engineer's Representative, he may refer the matter to the Engineer who shall confirm, reverse or vary the contents of such communication.

7.2.5 Deployment of Staff by the Engineer

The Engineer shall deploy any number of persons from his firm or appoint any number of persons in the carrying out of duties. Such persons have the authority to carry out their duties, acceptance of materials, verifications of drawings, checking the surveys, quantities of dredging, checking the locations of disposals of dredged material, plant or workmanship as being in accordance with the Contract, and any instructions given by any of them to the Contractor for those purposes shall be deemed to have been given by the Engineer's Representative on behalf of the Engineer of Deendayal Port Authority.

7.3 THE SITE

7.3.1 General Site Information

As per Technical specifications/ site information given in the intending tenderers

are expected to visit the site and satisfy themselves on the actual site conditions, meteorological and oceanographic data, soil/subsoil strata to be dredged and the areas identified for disposal of dredged material, before tendering. Whatever information regarding surface and subsurface strata, climatologically, oceanographic data given in the tender documents are only intended as a general guidance for the contractor and no warranty is give' for the correctness of the same.

7.4 SURVEYS AND LEVELS TO BE AGREED

7.4.1 Before the works of any part thereof begun, the Contractor's agent, a third party as appointed by the Employer, Employer and the Engineer's Representative shall together survey and take levels of the site of the works both above and below water level / Chart Datum level, and agree all particulars on which the measurements of the works are to be based. Such particulars shall be plotted by the Contractor and after agreement, the drawings shall be signed by the Contractor, Engineer or his authorized representative, Employer and the authorized signatory of the third party appointed by the Employer.

7.4.2 Failing such surveys and agreements being prepared and/or signed by the contractor, the survey of the Engineer shall be final and binding on the Contractor.

7.4.3 The contractor shall be entirely responsible for the horizontal and vertical alignment, the levels and correctness of every part of the work and shall rectify any errors or imperfection therein. Such rectification shall be carried out by the contractor, at his own cost.

7.5 SETTING OUT THE WORKS

7.5.1 The Employer shall furnish the relevant existing grid points with bench Mark with reference to Chart Datum. It shall be Contractor's responsibility to set out the necessary central points on land and to set out alignment. The contractor shall have in his employ efficient survey team for this purpose and the accuracy of such setting out works shall be contractor's sole responsibility.

7.5.2 Before beginning the work the Contractor shall work out the control points on grounds which are pre requisite for carrying out hydrographic surveys, accurately, with suitable markers as approved by the Engineer. All these points and markings shall be checked and approved by the Engineer or Engineer's Representative before starting the work.

7.5.3 The contractor shall also provide necessary equipment, labour and other

facilities for proper checking of triangulation / benchmark stations and inspection of the points during the survey and dredging operations at no cost to the Employer.

7.5.4 The contractor shall give the Engineer not less than 24 hours' notice in writing of his intention to set out or give levels for any part of the works so that arrangements may be made for checking the work.

7.5.5 Work shall be suspended for such times as necessary for checking lines and levels on any part of the works.

7.5.6 The Contractor shall at his own expense provide all assistance which the Engineer may require for checking the setting out.

7.5.7 The contractor shall at his own expense provide 1 qualified engineer & 1 qualified Executive (Administration and Finance) personnel to work at DPA's office for looking after the day to day works during the entire period of contract.

7.6 ORDER OF WORKS

The order in which the works are to be carried out shall be to the approval of the Engineer and shall be such as to suit the detailed method of construction, adopted by the contractor as well as the CPM schedule. The works shall be carried out in such a manner so as to enable the other contractors to work concurrently so that the entire project may be brought into use immediately after the completion of works.

7.7 CO-ORDINATION AND INSPECTION OF WORKS

The Co-ordination and inspection of the day-to-day work under the contract shall be the responsibility of the Engineer. The written instructions regarding any particular work will be normally passed by the Engineer. A work order book will be maintained by the Contractor for each sector in which aforesaid written instructions will be entered. These will be signed by the Contractor or his authorized representative by way of acknowledgment within 12 hours.

7.8 WORK IN MONSOON

The execution of the work entails working in the monsoon also. No special rate will be considered for such work in monsoon.

7.9 CONTRACTOR'S WORKING AREA

The Contractor shall be allowed working area as required by the Employer from time to time.

7.10 TEMPORARY WORKS, OFFICE, JETTY, ETC.

The Contractor shall submit to the Engineer for his approval, drawings and proposals for any temporary works such as storage yard, office, store, and workshop, etc. which he intend to construct for the execution of the contract and no such work shall be constructed before obtaining the written approval of the Engineer.

The Contractor shall obtain permission for any temporary work and would ensure that during execution of works the statutory requirements of the concerned authorities such as Deendayal Port Authority, Police, etc. would be complied with.

Materials for permanent works shall not be used for temporary works unless otherwise approved in writing by the Engineer.

Not less than one month before the date when the Contractor intends to start erecting any part of the temporary works and staging required for carrying out the works he shall furnish to the Engineer complete drawings of that part of the temporary works and staging. The Contractor shall at the same time, if so required by the Engineer furnishes calculations in respect of such temporary works. The Contractor shall also furnish to the Engineer drawings showing the method proposed for the erection of the various parts of the work.

The furnishing to the Engineer any design for any temporary works and staging shall not relieve the Contractor of any liability or obligation under the contract in respect of such temporary works and staging. All temporary works shall remain the property of the Contractor.

7.11 OPERATIONS OF THE EMPLOYER AND OTHERS

The ordinary business and works of the Employer and others as carried out on and in the vicinity of the site will be continued during the construction, completion and maintenance of the works and the execution of the Contract shall be conducted in such a way as to avoid interference with traffic of every kind by land and by water and with any other works in progress in vicinity.

The Contractor's attention is drawn to the fact that other contractors employed by the Employer may be working in the vicinity.

7.12 PORT TRUST RULES

The Contractor shall observe the conservancy rules relating to the Harbour and shall always take such necessary additional steps to keep the harbourwaters free of noxious or unhygienic matters coming from his works as are required by the Employer. Under no circumstances shall inflammable material be allowed to spill to the Harbour area.

The Contractor shall always observe and comply with the working rules and regulations of the Port Authority in force or as issued from time to time.

7.13 EXISTING SERVICES.

Drains, pipes, cables, overhead-wires and similar services encountered in the course of the work shall be guarded from injury by the Contractor at his own cost so that may continue in full and uninterrupted use to the satisfaction of the owners thereof or otherwise occupy any part of the site in a manner likely to hinder the operation of such services.

Should any damage be done by the Contractor to any drains, pipes, cables or lines (whether above or below ground), whether or not & shown on the drawings the Contractor must make good or bear the cost of making good the same without delay to the satisfaction of the Engineer and of the owners.

7.14 ENTRY ON PRIVATE OR OTHER PROPERTY

The Contractor shall not enter upon or commence any work in or upon, across or through any land, building or place being private property until authorized in writing by the Engineer or other competent authority to do so.

7.15 NOTICE OF OPERATIONS

No important operations shall be commenced nor shall work outside the usual working hours be carried out without the consent of the Engineer in writing or without full and complete notice also in writing being given to him.

7.16 SECURITY AND SAFETY

The Contractor shall comply with all regulations imposed by the Customs and Deendayal port Security Authorities in respect of the passage of Plant, Vehicles, materials and personnel through Customs and Port barriers.

The Contractor shall take all possible precaution to prevent out breaks of fire on the site and in all offices, stores, camps and other places and things connected therewith and especially with respect to the safe storage of petroleum products, explosives and all other dangerous or hazardous goods. He shall comply with all rules, regulations and orders of any Statutory Authority and of the Engineer at no extra cost to the Employer.

The Contractor shall obtain from the Employer details of any restricted areas in or around the site and shall have prominently and clearly displayed for the information of his staff and work people notices defining any such restricted areas. Such notices shall be provided at his own expenses.

The Contractor will be required to take entry passes to the restricted area of Port for all personnel labourers and vehicle. No claim whatsoever on this account will be entertained.

7.17 RETURNS AND DRAWINGS

All reports, statement, returns, diagrams, photographs or drawings, etc. which the contractor is required to submit to the Engineer are unless otherwise directed, to be furnished in the triplicate.

7.18 POSSESSION PRIOR TO COMPLETION

The Engineer shall have the right to take possession of or use any completed or partially completed work or part of the work. Such possession or use shall not deem to be acceptance of any work completion in accordance with the contract agreement. If such, prior possession or use by the Engineer delays the progress of work, on equitable adjustment in the time of completion will be made and the contract agreement shall be deemed to be modified accordingly.

7.19 COMPLETION DOCUMENTS

For the purpose of provision of **Clause 3.13 of the General Conditions of contract**, to treat that the w has been completed and issue a final payment certificate, the following documents will be deemed to form the completion documents:

- (i) The Technical documents according to which the work was carried out.
- (ii) The set of construction drawings showing therein the modifications and corrections made during the course of execution signed by the Engineer.
- (iii) Certificates of final levels as set out for various works.
- (iv) Certificates of tests performed for various works.

- (v) List of surplus materials returned to stores, if any.

7.20 DISPUTE IN MODE OF MEASUREMENT

In case of any dispute as to the mode of measurement not covered by the contract to be adopted for any item of work, mode or measurement as per relevant Indian Standard Specification (Latest revision) shall be followed.

7.21 INCOME TAX

Income tax on the gross amount bill shall be deducted from the Contractor's bill as per Section 194 C of the Income Tax Act or as applicable from time to time.

Section –VIII

DRAWINGS

Attached as Appendix A

Section– IX

FORMS OF BID

ANNEXURE-1

SPECIMEN EMD (Bank Guarantee Format)

[The Bank shall in accordance with the instructions indicated. To be executed on Rs.300/- non-judicial Stamp Paper] –

[Bank's Name, and Address of Issuing Branch or Office]

Beneficiary: _____ [Name and Address of Employer/ Board]

Date: _____

TENDER GUARANTEE No.: _____

We have been informed that [*name of the Tenderer*] (hereinafter called “the Tenderer”) has submitted to you its Tender dated (hereinafter called “the Tender”) for the execution of [*name of contract*] under Invitation for Tenders No. [*number*]. Furthermore, we understand that, according to your conditions, Tenders must be supported by an EMD.

At the request of the Tenderer, we [*name of Bank*] hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of [*amount in figures*] (*[amount in words]*) upon receipt by us of your first demand in writing accompanied by a written statement stating that the Tenderer is in breach of its obligation(s) under the Tender conditions, because the Tenderer:

- (a) has withdrawn its Tender during the period of Tender validity specified by the Tenderer in the Form of Tender; or
- (b) having been notified of the acceptance of its Tender by the Employer/ Board during the period of Tender validity, (i) fails or refuses to execute the Form of Agreement, if required, or (ii) fails or refuses to furnish the performance guarantee, in accordance with the Instructions to Tenderers.

This guarantee will expire unless otherwise extended at the request of the Contractor on whose behalf this guarantee is given.

- (a) if the Tenderer is the successful Tenderer, upon our receipt of copies of the contract signed by the Tenderer and the performance guarantee issued to you upon the instruction of the Tenderer; or
- (b) if the Tenderer is not the successful Tenderer, upon the earlier of
 - (i) our receipt of a copy of your notification to the Tenderer of the name of the successful Tenderer; or
 - (ii) twenty-eight days after the expiration of the Tenderer's Tender or any extended period thereof;

Consequently, any demand for payment under this guarantee must be received by us at the office on or before that date.

[signature(s)]

[Authorization letter from the issuing bank that the signatory of this BG is authorized to do so- should also be enclosed]s

SPECIMEN LETTER OF AUTHORITY FROM BANK FOR ALL BGs

(To be executed on Bank's Letter Head)

Date: To,
The Board of Trustees of Port of *[insert port]*,

Dear Sir,
Sub: Our Bank Guarantee No _____ dated
_____ for Rs. _____ favouring yourselves issued on a/c of
M/s _____
(Name of contractor)

.....

We confirm having issued the above-mentioned guarantee favouring
yourselves, issued on account of M/s validity for expiry upto date
_____ and claim expiry date upto _____.

We also confirm 1) _____ 2) _____ is/are
empowered to sign such Bank Guarantee on behalf of the Bank and his/their
signatures is/are binding on the Bank.

Name of Signature of Bank Officer

ANNEXURE-2

SPECIMEN LETTER OF AUTHORITY FOR SUBMISSION OF BID
(To be executed on Rs.100/- non-judicial Stamp Paper)

To

The (PORT Address)

Dear Sir,

We Particular do hereby confirm that
Shri ----- (Name, designation and Address) is/ are authorized to represent us
to bid, negotiate and conclude the agreement on our behalf with you against tender no
..... and his specimen
signature
is appended here to.

We confirm that we shall be bound by all and whatsoever our said signatory shall commit.

We understand that the communication made with him by the Employer/ Board
shall be deemed to have been done with us in respect of this Tender.

[specimen signature]

Yours faithfully,

Signature:

Name & Designation:

For & on behalf of:

SPECIMEN FOR FORM OF BID
(To be executed on bidder's letter head)

[The Tenderer shall fill in this Form in accordance with the instructions indicated No alterations to its format shall be permitted and no substitutions shall be accepted The Form shall be submitted in both the Techno- Commercial and Price Covers separately.] Date: [insert date (as day, month and year) of Tender Submission] Tender No.: [insert Tender number and Title]

To: *[insert complete name of Port]*

We, the undersigned, declare that:

- (a) We have examined and have no reservations to the Tendering Documents, including Addenda No.: *[insert the number and issuing date of each Addenda, Clarifications issued after Pre-bid meeting along with Minutes];*
- (b) We offer to execute the work in conformity with the Tendering Documents and in accordance with the Delivery Schedules specified in the Schedule of Requirements in accordance *with the tender document bearing no. {insert Tender no.};*
- (c) The total price of our Tender, excluding any discounts offered in item (d) below, is: *[insert the total Tender price in words and figures, indicating the various amounts and the respective currencies]; [in case of Techno- Commercial offer it shall be mentioned that "as filled in the Price Bid"]*
- (d) The discounts offered and the methodology for their application are:

Discounts. If our Tender is accepted, the following discounts shall apply. *[Specify in detail each discount offered and the specific item of the Schedule of Requirements to which it applies.] [in case of Techno- Commercial offer it shall be mentioned that "as filled in the Price Bid"]*

Methodology of Application of the Discounts. The discounts shall be applied using the following method: *[Specify in detail the method that shall be used to apply the discounts]; [in case of Techno- Commercial offer it shall be mentioned that "as filled in the Price Bid"]*

- (e) Our tender shall be valid for the period of time specified in **NIT Sub-Clause 1.5 and ITB Sub- Clause 2.3.3)** from the date fixed for the Tender submission deadline in accordance with NIT Sub- Clause 1.1 and **ITT Sub-Clause 2.2.6.1**, and it shall remain binding upon us and may be accepted at any time before the expiration of that period or any extended period in accordance with **ITB Sub- Clause 2.3.3**.
- (f) If our tender is accepted, we commit to obtain a performance guarantee in accordance with **ITB Sub-Clause 4.2** for the due performance of the Contract, as specified in specimen form for the purpose;
- (g) We, including any subcontractors or Contractors for any part of the contract, *[insert the nationality of the Tenderer, including that of all parties that comprise the Tenderer, if the Tenderer is a JV, and the nationality each subcontractor and Contractor];*
- (h) We have no conflict of interest in accordance with **ITB Sub-Clause**.
- (i) Our firm, its affiliates or subsidiaries—including any subcontractors or Contractor s for any part of the contract—has not been declared ineligible by the Port, under laws of India or official regulations, in accordance with **ITB Sub-Clause**.

- (j) We understand that this Tender, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal contract Agreement is prepared and executed in accordance with **ITB Clause 6.0** and as per specimen form the purpose;
- (k) We understand that you are not bound to accept the lowest evaluated Tender or any other Tender that you may receive.
- (l) We also make a specific note clauses of **[insert relevant nomenclature (in case of eqpt GCC, SCC and ITT)]** under which the Contract is governed.
- (m) In case of Out Station Firms, having a branch in India for liaison purposes, please mention the Name of the Contact person and Tel. No., Fax No., and mail- Id and also the Complete Postal Address of the Firm.
- (n) We understand that the Communication made with the Firm at (m), by the Port shall be deemed to have been done with us.

Signed: *[insert signature of person whose name and capacity are shown]*

In the capacity of *[insert legal capacity of person signing the Form of Tender]*

Name: *[insert complete name of person signing the Form of Tender]*

Duly authorized to sign the Tender for and on behalf of: *[insert complete name of Tenderer]*

Dated on day of _____ *[insert date of signing]*

PRE-QUALIFICATION OF BIDDERS

The information to be filled in by the Bidder in the following pages will be used for purposes of Pre-Qualification as provided for in the Instructions to Tenderers.

1. Only for Individual Bidders

1.1 Constitution or legal status of Bidder (*Attach copy*)

Place of registration:
Principal place of business
(Power of attorney of signatory of Bid (*Attach*))

2. Turnover of the Firm/ JV

Year	Turn over
[INSERT THE YEARS AS PER PQC, i.e. PREVIOUS THREE FINANCIAL YEARS ENDING 31ST MARCH 2023]	
Average	

Attachments: Financial reports for the last three years: balance sheets, profit and loss statements, auditors' reports and certificate of financial turnover for the previous three financial years ending 31st March 2023 issued by a Chartered Accountant (in case of companies/ corporation) etc. List them below and attach copies.

3. Similar Works

Particulars	Year	No. of works	Value
Total value of completed similar work as defined in the tender document during last 7 years	2022-23		
	2021-22		
	2020-21		
	2019-20		
	2018-19		
	2017-18 2016-17		

Similar works means – Similar dredging works means successfully completed dredging and capability of offshore disposal of dredged soil using suitable dredging equipment

Attachments: Supporting documents, viz., copies of work orders, successful work completion certificates from clients, other documentations to substantiate the similarity of work as per definition of "Similar Work". Scan copy of Original TDS Certificate must be furnished if the work completion certificate from any Private Organization is submitted. Employer reserve the right to verify the information;

4. The following Contractor's Equipment is essential for carrying out the works. The Bidder should list all the information requested below. ***[Only for Dredging Works]***

Item of equipment	Requirement No. Capacity	Owned/leased/to be procured	Nos./ Capacity	Age / Condition	Remarks (From whom to be purchased)

5. Information on litigation history in which the Bidder is involved.

Other party(ies)	Port	Cause of dispute	Amount	Remarks involved showing present status.

6. Additional Information Bidder may like to submit Duly authorized to sign this Authorization on behalf of: *[insert complete name of Tenderer]*

Dated on _____ day of _____, _____ *[insert date of signing]*

Annexure-3

EXCEPTIONS AND DEVIATIONS

As pointed out in the Tender Call Notice, Bidder may stipulate here exceptions and deviations to the bid conditions, if considered unavoidable.

S. No	Page No. of Bid Document	Clause No. of Bid Document	Subject Deviation

Note: However, the Bidders to note that un acceptable deviations, if any, the bid shall be liable for rejection. Bidder is discouraged to deviate from Bid conditions, specifications, delivery schedules, commercial terms as per the tender document.

Duly authorized to sign this Authorization on behalf of: *[insert complete name of Tenderer]*

Dated on _____ day of _____, _____ *[insert date of signing]*

LETTER OF ACCEPTANCE
(On letterhead paper of the

Date:

To: _____
(name and address of the Contractor)

Dear Sirs,

Sub: Tender No.
Title of the Tender

Ref: Your bid dated
And [list of correspondence with the bidder]

This is to notify you that your Bid dated _____ for execution of the _____ (name of the contract and identification number, as given in the Instructions to bidders) for the Contract Price of _____ Indian Rupees (amount in words and figures as corrected and modified in accordance with the Tender document is hereby accepted by the Employer/ Board.

You are hereby requested to furnish Performance Security, in the form detailed in Tender Document for an amount of Rs. __ within {14/21} days of the receipt of this letter of acceptance valid upto 28 days from the date of expiry of taking over certificate subject to removal of Defects Period i.e. upto _____ and also sign the contract agreement within {14/21} days of the receipt of this letter of acceptance, failing which action as stated in the tender document will be taken.

Detailed Letter of Acceptance will follow.

Please acknowledge receipt.

Yours faithfully,

Authorised Signature
Name and Title of Signatory
Name of Port

ISSUE OF NOTICE TO PROCEED WITH THE WORKS
(letter head of the Port)

Dated

**[Only for those tenders requiring separate commencement letter especially
when site handlover is required as per tender conditions]**

To
(name and address of the Contractors)

Dear Sirs,

Sub: Tender No.
Title of the Tender

Ref: Letter of Acceptance No. dated

Pursuant to your furnishing the requisite security as stipulated in **[Insert relevant Clause]** and signing of the contract for execution of the of _____, you are hereby instructed to proceed with the execution of the said works in accordance with the contract documents. It is hereby notified that the **[site]** is being handed over to you w.e.f. **[date]** for execution of work in accordance with the contract documents.

Yours faithfully

(Signature, name and title of
signatory authorised to sign on
behalf of Employer/ Board)

ANNEXURE-4

SPECIMEN CONTRACT AGREEMENT (To be executed on Rs.300/- non-judicial Stamp)
--

[The successful Tenderer shall fill in this form in accordance with the instructions indicated]

THIS CONTRACT AGREEMENT is made
the *[insert: **number**]* day of *[insert: **month**]*, *[insert: **year**]*.

BETWEEN

- (1) *The Trustees of Port of [insert name of the Port], an Autonomous Body of the Ministry of Ports, Shipping & Waterways of the Government of INDIA, incorporated under the Major Port Authority Act, 2021 as Amended / replaced thereafter, under the Laws of India and having its principal place of business at [insert address of Port] (hereinafter called "the Port"), and*
- (2) *[insert name of Contractor], [incorporated under] the laws of [insert: country of Contractor] and having its principal place of business at [insert: address of Contractor] (hereinafter called "the Contractor").*

WHEREAS the Employer/ Board invited Tenders against tender no. **[Number]** for execution of **[TENDER TITLE AND BRIEF DESCRIPTION]** viz., and has accepted a Tender by the Contractor in accordance with the supply/ delivery schedules, in the sum of *[insert Contract Price in words and figures, expressed in the Contract currency(ies)]* (hereinafter called "the Contract Price").

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

All the disputes related to submit contract shall be resolved through a conciliation committee / council comprising Independent Subject Tender Expert".

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to.
2. The following documents shall constitute the Contract between the Employer/ Board and the Contractor, and each shall be read and construed as an integral part of the Contract:
 - (a) This Contract Agreement;
 - (b) Special Conditions of Contract
 - (c) General Conditions of Contract;
 - (d) Technical Requirements (including Schedule of Requirements and Technical Specifications, drawings);
 - (e) Notice Inviting Tender;
 - (f) Replies issued to the Pre-bid queries, addenda is any issued **[numbers and dates]**;
 - (g) The Contractor's Bid and original Price and Delivery Schedules;
 - (h) The Employer/ Board's Notification of Award;
 - (i) [Correspondence the Employer/ Board had exchanged with the bidder till and after award of contract [specific letters and dates]; and
 - (j) [Add here any other document(s)]

AND WHEREAS

EMPLOYER/ BOARD accepted the Bid of CONTRACTOR for the provision and the execution of WORK at the CONTRACT PRICE as indicated in CONTRACT upon the terms and subject to the conditions of Contract. Now this CONTRACT AGREEMENT witnesses and it is hereby agreed and declared as follows:

3. In consideration of the payment to be made to CONTRACTOR for WORK to be executed by him. CONTRACTOR hereby Covenants with EMPLOYER/ BOARD that CONTRACTOR shall and will duly provide, execute and complete Work and things in CONTRACT, mentioned or described or which are to be implied there from or may be reasonably necessary for completion of Work and at the times and in the manner and subject to the terms and conditions or stipulations mentioned in CONTRACT.
4. In consideration of the due provision, execution and completion of WORK by the CONTRACTOR in accordance with the terms of the CONTRACT, the EMPLOYER/ BOARD does hereby agree with CONTRACTOR that EMPLOYER/ BOARD will pay to Contractor the respective amounts for the work actually done by him and approved by EMPLOYER/ BOARD as per Payment Terms accepted in CONTRACT and payable to CONTRACTOR under provision of Contract at such time and at such manner as provided for in the CONTRACT.

AND

5. In consideration of the due provision, execution and completion of WORK, CONTRACTOR does hereby agree to pay such sums as may be due to EMPLOYER/ BOARD for the services rendered by EMPLOYER/ BOARD to Contractor as set forth in CONTRACT and such other sums as may become payable to EMPLOYER/ BOARD towards loss, damage to the EMPLOYER/ BOARD's equipment, materials etc. and such payments to be made at such time and in such manner as is provided in the CONTRACT.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with the laws of *[insert the name of the Contract governing law country]* on the day, month and year indicated above.

For and on behalf of the Employer/ Board

Signed: *[insert signature]*
in the capacity of *[insert title or other appropriate designation]*
in the presence of *[insert identification of official witness]*

For and on behalf of the Contractor

Signed: *[insert signature of authorized representative(s) of the Contractor]*
in the capacity of *[insert title or other appropriate designation]*
in the presence of *[insert identification of official witness]*

ANNEXURE-5

SPECIMEN BANK GUARANTEE PERFORMANCE GUARANTEE/ SECURITY DEPOSIT (To be executed on Rs.300/- non-judicial Stamp Paper)

[The bank, as requested by the successful Tenderer, shall fill in this form in accordance with the instructions indicated]

In consideration of the Board of Deendayal Port Authority [**insert name of Port**] incorporated by the Major Port Authority Act, 2021 (hereinafter called "The Board" which expression shall unless excluded by or repugnant to the context or meaning thereof be deemed to include the Board of Deendayal Port Authority [**insert name of Port**], its successors and assigns) having agreed to exempt ____ (hereinafter called the "Contractor")'

(Name of the Contractor/s)
from the demand under the terms and conditions of the Contract, vide _____'s letter No. _____

(Name of the Department)
date _____ made between the Contractors and the Board for execution of _____ covered under _____ Tender No. _____ dated _____ (hereinafter called "the said contract") for the payment of Security Deposit in cash or Lodgment of Government Promissory Loan Notes for the due fulfilment by the said Contractors of the terms and conditions of the said Contract, on production of a Bank Guarantee for Rs. _____ (Indian Rupees _____) only we, the (Name of the Bank and Address) _____

(hereinafter referred to as "the Bank") at the request of the Contractors do hereby undertake to pay to the Board an amount not exceeding Rs. _____ (Indian Rupees _____) only against any loss or damage caused to or suffered or which would be caused to or suffered by the Board by reason of any breach by the Contractors of any of the terms and conditions of the said contract.

1. We, _____, _____, _____ do hereby

(Name of Bank) (Name of Branch)
undertake to pay the amounts due and payable under this guarantee without any demur merely on a demand from the Board stating that the amount claimed is due by way of loss or damage caused to or which would be caused to or suffered by the Board by reason of any breach by the Contractors of any of the terms and conditions of the said contract or by reason of the Contractors failure to perform the said contract. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this Guarantee. However, our liability under this guarantee shall be restricted to any amount not exceeding Rs. _____ (Indian Rupees _____) only.

2. we, _____, undertake to pay to the
(Name of Bank and Branch)

Board any money so demanded notwithstanding any dispute or disputes raised by the Contractor(s) in any suit or proceeding pending before any Court or Tribunal relating thereto our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment there under and the Contractor(s) shall have no claim against us for making such payment.

3. We, _____ further agree with the Board that
(Name of Bank and Branch)

the guarantee herein contained shall remain in full force and effect during the period that would be taken for performance of the said contract and that it shall continue to be enforceable till all the dues of the Board under or by virtue of the said contract have been fully paid and its claims satisfied or discharged or till the _____

(Name of the user department)

of the said certifies that the terms and conditions of the said contract have been fully and properly carried out by the said Contractors and accordingly discharge this guarantee. PROVIDED HOWEVER that the Bank shall, the request of the Contractor, renew or extend this guarantee for such further period or periods as the Board may require from time to time.

4. We, _____ further agree with the Board
(Name of Bank and Branch)

that the Board shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said contract or to extend the time of performance by the said contract or to extend the time of performance by the said Contractors from time to time or to postpone for any time or from time to time any of the powers exercisable by the Board against the said Contractors and to forebear or enforce any of the terms and conditions relating to the said contract and we shall not be relieved from our liability by reason of any such variation or extensions being granted to be Contractors or for any forbearance, act or omission on the part of the Board or any indulgence shown by the Board to the Contractors by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

5. This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor(s).

6. It is also hereby agreed that the Courts in **Gandhidham** would have exclusive jurisdiction in respect of claims, if any, under this Guarantee.

7. We, _____ Bank lastly undertake not to revoke this guarantee during its currency except with the previous consent of the Board in writing.

8. *Notwithstanding anything contained herein:

(a) Our liability under this Bank Guarantee shall not exceed Rs. _____
(Indian Rupees _____ only);

(b) this Bank Guarantee shall be valid upto _____; and

(c) we are liable to pay the guarantee amount or any part thereof under this Bank Guarantee only and only if you serve upon us a written claim or demand on or before_(date of expiry of Guarantee).”

Date _____ day of _____ 20

For (Name of Bank)

(Name)

Signature

ANNEXURE-6

TABLE- 1(1)

DETAILS OF PAST EXPERIENCE OF CONTRACTOR FOR SIMILAR DREDGING WORK

S. No	Name of Project	Location	EMPLOYER's Address	Commencement Date	Completion Date		Value	Duration of Contract
					Scheduled	Actual		

ANNEXURE-7

TABLE - 1(2)

CONCURENT COMMITMENTS OF THE BIDDER

S. No	Name of the Project	Employer's Address	Value of Work	Scheduled Date of		Expected Completion
				Commencement	Completion	

SIGNATURE OF BIDDER

ANNEXURE-8

TABLE- 1 (3)

LIST OF DREDGERS AND OTHER MAJOR EQUIPMENTS PROPOSED FOR THE WORK

S. No.	Dredger/Craft Equipment Proposed (with registration)	Capacity/size/ loaded/ draft Speed of vessel dredge pump RPM/ position fixing system/load recording instrument/speed of the vessel/diameter & length of shore pipe etc.	Year of built	Remarks

Note: (1) The bidder is requested to give all relevant and complete information as required and if required he can use separate sheets.

SPECIMEN FORMAT FOR DECLARATION

(To be executed on bidder's letter head)

To

(Project Title)

Ref: _____

The undersigned, having studied the pre-qualification submission for the abovementioned project, hereby states:

- (a) The information furnished in our bid is true and accurate to the best of my knowledge.
- (b) That in case of being pre-qualified, we acknowledge that the Employer may invite us to participate in due time for the submission of a tender on the basis of provisions made in the tender documents to follow.
- (c) When the call for tenders is issued, if the legal, technical or financial conditions, or the contractual capacity of the firm or joint venture changes, we commit ourselves to inform you and acknowledge your sole right to review the pre-qualification made.
- (d) We enclose all the required pre-qualification data format and all other documents and supplementary information required for the pre-qualification evaluation.
- (e) We also state that no changes have been made by us in the downloaded tender documents and also understand that in the event of any discrepancies observed, the printed tender document No. _____ is full and final for all legal/contractual obligations (delete if not required).

Date:

Place:

Name of the Applicant:

Represented by (Name & capacity)

ANNEXURE 9

**PROFORMA OF POWER- OF-ATTORNEY FOR LEAD MEMBER OF JV/ CONSORTIUM
((To be submitted on Non-judicial Stamp Paper of appropriate value)**

By this Power-of-Attorney executed on thisday of(month) of 2018, we,

(i) (.....Name of legally authorized signatory of first partner to be filled in.....), (ii) (.....Name of legally authorized signatory of second partner to be filled in),

..... hereby jointly authorize and

agree the Lead Partner, M/s (... Name of the lead partner to be filled in.....), (a) to submit bid, negotiate and conclude contract and incur all liabilities therewith on behalf of the partner(s) of the JV /Consortium during the bidding process; and (b) in the event of a successful bid, to incur liabilities and receive instructions for and on behalf of the partner(s) of the JV /Consortium and to carry out the entire execution of the contract including payment for the work of-Development of four lane road common corridor from LC 236B to 16th CB along railway line(Phase- I)exclusively through Lead Partner.

(i) Signature Name Designation seal & Common seal of the firm

(ii) Signature Name Designation seal & Common seal of the firm

.....

.....

Signature, name and seal of the certifying authority/Notary Public

PROFORMA OF JOINT VENTURE/CONSORTIUM AGREEMENT
(To be submitted on Non-judicial Stamp Paper of appropriate value)

This Joint Venture /Consortium Agreement is made and entered into on this day of20... by and between (i) M/s..... **Name of the firm to be filled-in**)....., (ii) M/s.....(**Name of the firm to be filled-in**)....., primarily for the work under the Deendayal Port Authority.

All the partners of the Joint Venture /Consortium hereinafter individually referred to as the parties and collectively as the Joint Venture/Consortium‘.

1. Formation of Joint Venture/Consortium

1.1. (i) M/s... (**Name of the firm to be filled in**) is engaged in
.....(**Details of the works undertaken by the party**)

(ii) M/s... (**Name of the firm to be filled in**) is engaged in
.....(**Details of the works undertaken by the party**)

(iii)

1.2. On behalf of Board of Trustees of Deendayal Port (hereinafter referred to as Employer), the (Designation of HOD), Deendayal Port Authority has invited bids from the experienced, resourceful and bonafied Contractor with proven technical and financial capabilities of executing the work (**Name of work**).

1.3. The parties have been exploring together the ways and means of collaboration for the purpose of an offer to be made for the said project of the Deendayal Port Authority and have mutually agreed to enter into a Joint Venture/Consortium Agreement to submit a common bid for the project and to carry out the project works in the event of award of the contract, in association with each other and (.....**Name of Partner to be filled in**.....) shall be the Lead Partner and (i) (.....**Name of Partner to be filled in**.....), (ii) (.....**Name of Partner to be filled in**) shall be the other partner(s).

NOW THEREFORE IT HAS BEEN AGREED TO BETWEEN THE PARTIES AS
FOLLOWS

1.4. The Joint Venture/Consortium will be known as.....(**Name of JV to be**

filled in.....)and shall consist of (i) (**.....Name of the firm to be filled in.....**), (ii) (**.....Name of the firm to be filled-in.....**),...
....., parties to the present agreement.

1.5. The recitals are true and correct and form an integral part of this agreement and are representations of the parties to which they relate and have been relied upon by the parties to enter into the present agreement.

1.6. Notwithstanding the date of signature of this agreement, its effective date will be the date of submission of bid.

1.7. All costs incurred by the parties before the date of award of contract will be borne by the parties concerned. All costs in implementation of this Joint Venture/Consortium Agreement after award of contract till the expiry of this agreement will be borne by the parties as hereinafter provided.

1.8. The Joint Venture/Consortium will be dissolved and this agreement will cease to have effect on completion of this project, maintenance and fulfilment of all other conditions under the contract, upon receipt of payment of all amounts from the Employer and on settlement of accounts between the parties as hereinafter provided.

1.9. The contract, if awarded by the Employer, Letter of Acceptance shall be issued in the name of (**....Name of JV/Consortium to be filled in.....**) and the Contract shall be signed by legally authorized signatories of all the parties.

1.10. All the parties of the JV/Consortium shall be jointly and severally liable during the bidding process and the bid document shall be signed by legally authorized signatory of all the parties.

1.11. The financial contribution of each partner to the JV/Consortium operation shall be:

(i) M/s..... (**Name of the partner to be filled-in**) -

(ii) M/s..... (**Name of the partner to be filled-in**) -

(iii)

1.12. All the parties of the JV/Consortium shall be jointly and severally liable for the execution of the project in accordance with the Contract terms, in the event of award of contract. The delineation of duties, responsibilities and scope of work shall be:

a) The Lead Partner shall provide suitable experienced personnel at site, for general planning, site management and equipment operations, during entire period of contract execution.

b) (.....**Name of Partner to be filled-in**.....) shall carry out the following works :-

c) (.....**Name of Partner to be filled-in**.....) shall carry out the following Works:-

d)

1.13. The parties hereto agreed that each of them shall duly and properly perform all the functions and all costs related to their respective works.

1.14. The parties hereto shall be at liberty to enter into liaison work/correspondence with statutory and local authorities as the circumstances warrant individually or collectively.

1.15. It is hereby agreed and undertaken that, all the parties are jointly and severally liable to the Board of Deendayal Port Authority for the performance of the contract.

1.16. Notwithstanding demarcation or allotment of work between JV/Consortium partners, JV/Consortium each partner shall be liable for non performance of the whole contract irrespective of their demarcation or share of work.

1.17. The Lead Partner shall be authorized to act on behalf of the JV/Consortium.

1.18. All the correspondences between the Employer and the JV/Consortium shall be routed through the Lead Partner.

1.19. The Lead Partner is authorized: (a) to submit bid, negotiate and conclude contract and incur all liabilities therewith on behalf of the partner(s) of the JV /Consortium during the bidding process; and (b) in the event of a successfulbid, to incur liabilities and receive instructions for and on behalf of the partner(s)of the JV/Consortium and to carry out the entire execution of the contract including payment, exclusively through Lead Partner.

1.20. In the event of default of the Lead Partner, it shall be construed as default of the Developer/Contractor; and Employer shall be entitled to take action under relevant clause(s) of the Department Bid Document and/or Conditions of Contract.

1.21. All the parties of the JV/Consortium shall be jointly and severally liable for due performance, recourse/sanctions within the joint venture in the event of default of any partner and arrangements for providing the required indemnities.

1.22. The JV/Consortium shall have a separate JV/Consortium Bank account (distinct from the Bank account of the individual partners) to which individual partners shall contribute their share capital / or working capital. The financial obligation of the consortium shall be discharged through the said JV/ Consortium Bank account only and also all payment received by consortium from the

Deendayal Port Authority shall be through that account only.

The parties hereto have mutually agreed to the terms and conditions set forth herein above and have assured each other to duly perform the reciprocal promises and obligations on either side for effective implementation of the JV/Consortium for proper and due completion of the works envisaged, in the event of award of contract to the JV/Consortium and have affixed their signature in this indenture on this theday of.....20...

(i) Signature Name

Designation seal &

Common seal of the firm

(ii) Signature Name

Designation seal

&

Common seal of the firm

Witness1

Witness2

SPECIMEN BANK GUARANTEE FOR ADVANCE PAYMENT
(To be executed on Rs.100/- non-judicial Stamp Paper)

[The bank, as requested by the successful Tenderer, shall fill in this form in accordance with the instruction indicated]

In consideration of the Board of Deendayal Port Authority incorporated by the Major Port AUTHORITIES Act , 2021 (hereinafter called "The Board" which expression shall unless excluded by or repugnant to the context or meaning thereof be deemed to include the Board of Deendayal Port Authority, its successors and assigns) having agreed to release advance payment to (hereinafter called the "contractor")

(Name of the contractor/s)

from the demand under the terms and condition of the contract, vide from the demand under the condition of the contract, vide _____'s letter No

(Name of the Department)

Date _____ made between the contractors and the Board for execution of

_____ covered under Tender No. _____
_____ dated _____ (hereinafter called "the said contract") for the payment of Advance Payment in cash or Lodgement of Government Promissory Loan Notes for the due fulfillment by the said contractors on production of a Bank Guarantee for Rs. _____ (Rupees _____) only we, the (Name of the Bank and Address) _____ (hereinafter Referred to as "the Bank") the request of the contractors do hereby undertake to pay to the Board an amount not exceeding Rs. _____ (Rupees _____) only against any loss or damage caused to or suffered by the Board by reason of any breach by the contractors of any of the terms and conditions of the said contract.

2. We, _____, do hereby

(Name of Bank) (Name of Branch)

Undertake to pay the amount due and payable under this guarantee without any demur merely on a demand from the Board stating that the amount claimed is due by way of loss or damage caused to or which would be caused to or suffered by the Board by reason of the contractors failure to perform the said contract. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this Guarantee. However, our liability under this guarantee shall be restricted to any amount not exceeding Rs.

_____ (Rupees
_____) only.

3 We, _____, undertake to pay to the

(Name of Bank and Branch)

Board any money so demanded notwithstanding any dispute or disputes raised by the contractor(s) in any suit or proceeding pending before any Court or Tribunal relating thereto our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment there under and the Contractor(s) shall have no claim against us for making such payment.

4. We, _____ further agree with the Board that the

(Name of Bank and Branch)

guarantee herein contained shall remain in full force and effect during the period that would be taken for performance of the said contract and that it shall continue to be enforceable till all the dues of the Board under or by virtue of the said contract have been fully paid and its claims satisfied or discharged or till the _

(Name of the user department)

of the said certifies that the terms and conditions of the said contract have been fully and properly carried out by the said Contractors and accordingly discharge this guarantee. PROVIDED HOWEVER that the Bank shall be the request of the Board but at the cost of the Contractors, renew or extend this guarantee for such further period or periods as the Board may require from time to time.

5. We, _____ further agree with the Board that the
(Name of Bank and Branch)

Board shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said contract or to extend the time of performance by the said contract or to extend the time of performance by the said Contractors from time to time or to postpone for any time or from time to time any of the powers exercisable by the board against the said Contractors and to forebear or enforce any of the terms and conditions relating to the said contract and we shall not be relieved from our liability by reason of any such variation or extensions being granted to the contractors or for any forbearance, act or omission on the part of the Board or any indulgence shown by the board to the Contractors or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

6. This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor(s).

7. It is also hereby agreed that the Courts in [Gandhidham] would have exclusive jurisdiction in respect of claims, if any, under this Guarantee.

8. We, _____ Bank lastly undertake not to revoke this guarantee during its currency except with the previous consent of the Board in writing.

9. Notwithstanding anything contained herein:

(a) Our liability under this Bank Guarantee shall not exceed Rs. _____ (Rupees _____ only);

(b) This Bank Guarantee shall be valid upto _____; and

(c) We are liable to pay the guarantee amount or any part thereof under this Bank Guarantee only and only if you serve upon us a written claim or demand on or before _____ (date of expiry of Guarantee)."

Date _____ day of _____ 20

For (Name of Bank)

(Name)

Signature

INTEGRITY PACT

Between

Deendayal Port Authority (DPA) hereinafter referred to as "**The Principal**"

and

..... (Name of The bidders and consortium members) hereinafter referred to as
"The Bidder / Contractor"

Preamble

The Principal intends to award, under laid down organizational procedures, contract(s) / concession(s) for Tender No. The Principal values full compliance with all relevant laws of the land rule regulations, economic use of resources and of fairness / transparency in its relations with its Bidder(s) and / or Contractor(s).

In order to achieve these goals, the Principal will appoint Independent External Monitors (IEMs), who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

Section 1 - Commitments of the Principal

(1) The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:-

- (a) No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
- (b) The Principal will, during the tender process treat all Bidder(s) with equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential / additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.
- (c) The Principal will exclude from the process all known prejudicial persons.

(2) If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the IPC / PC Act, or if there be a substantive suspicion in this regard, the Principal will inform the Chief Vigilance Officer and in addition can initiate disciplinary actions.

Section 2 - Commitments of the Bidder(s) / Contractor(s)

(1) The Bidder(s) / Contractor(s) commits themselves to take all measures necessary to prevent corruption. The Bidder(s) / Contractor(s) commits themselves to observe the following principles during participation in the tender process and during the contract execution.

- a. The Bidder(s) / Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal's employees involved in tender process or the execution of the contract or to any third person any material or other benefit, which he / she is not legally entitled to, in order to obtain in exchange of advantage of any kind whatsoever during the tender process or during the execution of the contract.
- b. The Bidder(s) / Contractor(s) will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids, or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.
- c. The Bidder(s) / Contractor(s) will not commit any offence, under the relevant Prevention of Corruption Act / Indian Penal Code / PC Act; further the Bidder(s) / Contractor(s) will not use improperly, for purposes of competition, or personal gain, or pass on to others any information or document provided by the Principal, as

part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.

- d. The Bidder(s) / Contractor(s) of foreign origin shall disclose the name and address of the Agents / Representatives in India, if any. Similarly, the Bidder(s) / Contractor(s) of Indian Nationality shall furnish the name and address of the foreign principals, if any. Further details as mentioned in the "Guidelines on Indian Agents of Foreign Suppliers" shall be disclosed by the Bidder(s) / Contractor(s). Further, as mentioned in the Guidelines all the payments made to Indian agent / representative have to be in Indian Rupees only. Copy of the "Guidelines on Indian Agents of Foreign Suppliers" is placed at (page Nos. 56-65)
 - e. The Bidder(s) / Contractor(s) will, when presenting their bid, disclose any and all payments made, is committed to or intends to make to agents, brokers or any other intermediaries, in connection with the award of the contract.
 - f. Bidder(s) / Contractor(s) who have signed the Integrity Pact shall not approach the Courts while representing the matter to IEMs and shall wait for their decision in the matter.
- (2) The Bidder(s) / Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

Section 3 - Disqualification from tender process and exclusion from future contracts.

If the Bidder(s) / Contractor(s), before award or during execution has committed a transgression through a violation of Section-2 above, or in any other form, such as to put their reliability or credibility in question, the Principal is entitled to disqualify the Bidder (s) / Contractor(s), from the tender process, or take action as per the procedure mentioned in the "Guidelines on Banning of business dealings". Copy of the "Guidelines on Banning of business dealings" is placed at (Page No. 56-65).

Section 4 - Compensation for Damages

- (1) If the Principal has disqualified the Bidder(s), from the tender process prior to the award, according to Section 3, the Principal is entitled to demand and recover the damages equivalent to Earnest Money Deposit / Bid Security.
- (2) If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to Section 3, the Principal shall be entitled to demand and recover from the Contractor, liquidated damages of the Contract Value or the amount equivalent to Security Deposit / Performance Bank Guarantee, whichever is higher.
- (3) The Bidder(s) agrees and undertakes to pay the said amounts, without protest or demur, subject only to condition that, if the Bidder(s) / Contractor(s) can prove and establish that the termination of the contract, after the contract award has caused no damage or less damage than the amount of the liquidated damages, the Bidder/Contractor shall compensate the principal, only to the extent of the damage in the amount proved.

Section 5 - Previous transgression

- (1) The Bidder declares that, no previous transgressions occurred in the last three years with any other company in any country confirming to the anti-corruption approach or with any other Public Sector Enterprises in India, that could justify his exclusion from the tender process.
- (2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or action can be taken as per the procedure mentioned in "Guidelines on Banning of Business dealing".

Section 6 - Equal treatment of all Bidders / Contractors

- (1) In case of a Joint Venture, all the partners of the Joint Venture will enter into agreement with identical conditions as this on which all Bidders.
- (2) There is no provision of sub-contract in the tender. In any violation of the same, Contractor shall be held solely

responsible for the same.

Section 7 - Criminal charges against violating Bidders / Contractors

If the principal obtains knowledge of conduct of a Bidder or Contractor or of an employee, or a representative, or an associate of a Bidder or Contractor, which constitutes corruption, or if the Principal has substantive suspicion, in this regard, the Principal will inform the same to the Chief Vigilance Officer (CVO) and the CVO will take further necessary action as deemed fit in accordance with the CVC Manual.

Section 8 - External Independent Monitor

- (1) The Principal appoints competent and credible Independent External Monitor for this Pact after approval by Central Vigilance Commission. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.
- (2) The Monitor is not subject to instructions by the representative of the parties and performs his / her functions neutrally and independently. The Monitor would have access to all Contact documents, whenever required. It will be obligatory for him / her to treat the information and documents of the Bidders / Contractors as confidential. He / she reports to the Chairperson of the Board of the Principal.
- (3) The Bidder(s) / Contractor(s) accepts that the Monitor has the right to access without restriction to all Project documentation of the Principal including that provided by the Contractor. The Bidder / Contractor will also grant the Monitor, upon his / her request and demonstration of a valid interest, unrestricted and unconditional access to the project documentation. The Monitor is under contractual obligation, to treat the information and documents of the Bidder / Contractor with confidentiality.
- (4) The Monitor is under contractual obligation to treat the information and documents of the Bidder(s) / Contractor(s) with confidentiality. The Monitor has also signed declaration on "Non-Disclosure of Confidential Information" and of "Absence of Conflict of Interest". In case of any conflict of interest arising at a later date, the IEM shall inform Chairman, DPA and recues himself / herself from that case
- (5) The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the Principal and the Bidder / Contactor. The parties offer to the Monitor the option to participate in such meetings.
- (6) As soon as the Monitor notices, or believes to notice, a violation of this agreement, he / she will so inform the Management of the Principal and request the management to discontinue, or take corrective action. The Monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.
- (7) The Monitor will submit a written report to the Chairperson of the Board of the Principal, within 8 to 10 weeks from the date of reference or intimation to him by the Principal and, should the occasion arise, submit proposals for correcting problematic situations.
- (8) If the Monitor has reported to the Chairperson of the Board of the Principal, a substantiated suspicion of an offence under relevant IPC / PC Act and the Chairperson of the Board of the Principal has not, within reasonable time taken visible action to proceed against such offence or reported it to the Chief Vigilance Officer, the Monitor may also transmit this information directly to the Central Vigilance Commissioner, Government of India.
- (9) The word "**Monitor**" would include both singular and plural.

Section 9 - Pact Duration


This Pact begins when both parties have legally signed it. It expires for the Contractor 12 months after the last payment under the contract, and for all other Bidders 6 months after the contract has been awarded. Any violation of the same would entail disqualification of the bidder and exclusion from future business dealings.

If any claim is made / lodged during this time, the same shall be binding and continue be valid despite the lapse of this Pact as specified above, unless it is discharged / determined Chairperson of the Principal.

The Pact duration in respect of unsuccessful Bidders shall expire after 6 months of the award of the contract.

Section 10 - Other Provisions

- (1) This agreement is subject to Indian Law. Place of performance and jurisdiction is the Registered Office of the Principal, i.e. Gandhidham, Gujarat.
- (2) Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.
- (3) If the Bidder / Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.
- (4) Should one or several provisions of this agreement, turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.
- (5) Issues like Warranty / Guarantee etc. shall be outside the purview of IEMs.
- (6) In the event of any contradiction between the Integrity Pact and its Annexure, the Clause in the Integrity Pact will prevail.


(For & on behalf of the Principal)
उप मुख्य अभियंता (ज. एव. नि.)
दीनदयाल पोर्ट प्राधिकरण
(Office Seal) Dy. Chief Engineer (H&D)
Deendayal Port Authority

(For & on behalf of the Bidder/Contractor)

(Office Seal)

Place : Gandhidham

Date : ____/____/20____

Witness-1:

(Name & Address) _____

Witness-2 :

(Name & Address) _____

