

DREDGING CORPORATION OF INDIA
VISAKHAPATNAM

DCI/TECH/Dredge BH1/12/20-21

Dated 01 Jun 2020

CORRIGENDUM

Sub: - TENDER FOR DRY – DOCK REPAIRS OF DCI DREDGE BH1

Ref: - Tender No. DCI/TECH/Dredge BH1/12/20-21 dated 21 May 2020

1. Further to the advertisement uploaded in M/s. Dredging Corporation of India website vide reference cited above please note that the last date of submission of tender document is now extended up to 1500 hrs on 11 Jun 2020. All remaining terms and conditions of tender are same.
2. Tenderers are requested to log on to www.dredge-india.com, <http://eprocure.gov.in> for further details

GM (T)



DREDGING CORPORATION OF INDIA LIMITED

**“Dredge House” Port Area,
VISAKHAPATNAM-530 035 (INDIA)**

Phone: 91-891-2871378/2871395

Mobile: 09949825217

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E-mail: hodtech@dcil.co.in

NIT REF: DCI/TECH/BH1/12/2020-21

Date: 21.05.2020

NOTICE INVITING TENDERS

1. Sealed tenders are invited from reputed East Coast Shipyards for attending dry-dock & afloat repairs of DCI DREDGE BH1. The vessel requires to be dry-docked at an estimated period of 50 days by June 2020. Repair jobs to be attended are given below:
 - a) Dock hire and Service Charges
 - b) Cleaning and Painting
 - c) Steel Plate Renewals
 - d) Dredging equipment
 - e) Engine room machinery
 - f) Valves and pipe lines
 - g) Electrical Equipment
 - h) Cost plus Jobs
2. Interested ship repair yards can download tender documents from our website www.eprocure.gov.in OR www.dredge-india.com
3. The downloading of tender documents shall be carried out strictly as provided on the website. No addition, editing, deletion of matter shall be permitted. If such action is observed at any stage, such tender will not be considered and will be rejected.
4. The Tenderer shall deposit cost of tender documents of Indian Rs. 6000.00 into DCI account No: 35833070000014, IFSC code: SYNB0003583, MICR code: 530025003, Syndicate Bank, DCI Branch, Visakhapatnam and to enclose evidence of receipt along with Technical Bid documents, without which Tenders will be rejected.
5. **Earnest Money Deposit (EMD):** The Tenderer shall deposit Earnest Money deposit of Indian Rs.4,43,000 (Indian Rupees four Lakhs forty three thousand only) into DCI account No: 35833070000014, IFSC code: SYNB0003583, MICR code: 530025003, Syndicate Bank, DCI Branch, Visakhapatnam and to enclose evidence of receipt along with Technical Bid documents, without which Tenders will be rejected.
6. The last date for submission of tender is **1500** hours on 04.06.2020
7. Further instructions are given in the tender documents.
8. Bidders should have their own drydock / leased dry dock with full repair infrastructure and relevant experiences in dredgers repairs and confirm the availability of dock space to positively dry dock the vessel by first week of Jun 2020.

General Manager (TECH)



DREDGING CORPORATION OF INDIA LIMITED

(A Government of India Undertaking)

**“Dredge House” Port Area,
VISAKHAPATNAM-530 035**

DCI/TECH/BH1/12/2020-21

Date: 21.05.2020

To,

M/s.

Dear Sirs,

Sub: Invitation of tenders for drydock & afloat repairs of DCI DREDGE BH1,
Official No. M-7704

1. Dredging Corporation of India Ltd, is calling for tenders to carry out planned drydock & afloat repairs of DCI DREDGE BH1, by June 2020. The vessel, built in 2011 by DE DONGE FLUSING YARD BV.
2. The tender should be submitted in two cover bid system duly super scribed “Tender for Dry Dock and afloat repairs of Dredge BH1– Part-I Technical Bid and Part-II Financial Bid” in two separate covers which are to be put in one single cover super scribed “Tender No: **DCI/TECH/BH1/12/2020-21** Date: 21.05.2020 and due date: 04.06.2020”. The Technical Bid should contain the following:
 - i. Schedule-I of the Tender documents i.e. General Tender Conditions duly stamped and signed by authorized signatory;
 - ii. Schedule-II of the tender documents i.e. Special Terms and Conditions duly stamped and signed by the authorized signatory;
 - iii. The tenderer should have experience in dry dock repairing at least one similar type of Dredger during the last 5 years (Necessary Proof to be enclosed along with Technical bid).
 - iv. The Technical Bid should not contain any prices but should indicate the percentage of taxes, duties, etc., if any and also should clearly indicate whether such taxes and duties etc. were included in the Financial Bid or otherwise.
 - v. Any issues which have a bearing on the Financial Bid are to be brought out in the Technical Bid.
 - vi. Technical Bids of Yards should clearly indicate the number of days in dry dock and number of days of afloat repairs and trials. Yards should clearly indicate the availability of dock space and lead time if any. Yards should clearly indicate their quotation validity and acceptance to DCI tender terms & conditions. However, any deviations to the tender (both in technical & price bid) are to be listed out and brought into notice in Technical Bid only.
 - vii. Cost of Tender documents Rs.6,000.00 and EMD Rs 4,43,000/- shall be deposited into DCI account No: 35833070000014, IFSC code: SYNB0003583, MICR Code: 530025003, Syndicate Bank, DCI Branch, Visakhapatnam, and to enclose evidence of receipt along with tender.
 - viii. Without cost of Tender documents and EMD, tenders will be rejected.
3. The second cover containing the Financial Bid should contain the financial offer as per Schedule-IV duly indicating the cost of repairs against each item of repair both in figures and words and signed by authorized signatory. In addition, the Annexure to Schedule-IV should be filled in, duly signed by authorized signatory and submitted with the Financial Offer.

4. Two sets of tender documents consisting of the following schedules are to be downloaded from our website for submission of your most competitive time and cost offer in two-cover bid system in line with para-2 above:

- a. Schedule-I : General Tender Conditions
- b. Schedule-II : Special Conditions
- c. Schedule-III : Particulars of Dredger
- d. Schedule-IV : Work scope-group wise repair specifications
- e. Annexure-I to Sch-IV : Summary of offer
- f. Schedule-V : List of deviations, if any.
- g. Schedule-VI : Guidelines to the Yard
- h. Schedule- VII : Details of the yard.
- i. Schedule- VIII : Check List for Tenderers.

5. While submitting your competitive offer, you are advised to consider 30% increase in scope of work over and above the jobs specified at Schedule-IV towards unforeseen jobs.

6. Interested parties may visit DCI DREDGE BH1 presently deployed at Visakhapatnam, C/o Dredging Corporation. Of India Ltd., Contact No of Project Manager, 8019292300 for inspection and satisfy themselves before submitting their tender.

7. Tenders will be received at the following address:
THE GENERAL MANAGER (TECHNICAL)
DREDGING CORPORATION OF INDIA LTD.,
DREDGE HOUSE, PORT AREA,
VISAKHAPATNAM- 530 001
ANDHRA PRADESH, INDIA

8. All the dry docking repairs are to be carried out under the inspection / supervision of Indian Register of Shipping/IWT/IV of state of registry. However, IRS/ IV fees for this purpose will be borne by DCI.

9. The tenders will be received till 1500 hours 04.06.2020 and only Technical Bids (Part-I) will be opened on the same day at 1530 hours at DCI Head Office, Visakhapatnam, in the presence of tenderers who wish to be present at that time. The Financial Bids (Part-II) of the technically qualified tenderers will be opened at a later date with prior intimation to the tenderers.

10. Tenders received after the due date and time shall not be considered and summarily rejected. The delay due to postal / courier services, etc., shall not be considered.

Thanking you,

Yours faithfully,
For Dredging Corporation of India Limited,

(Dr. GVR Murthy)
General Manager (Tech)

Encl: As above.

DREDGING CORPORATION OF INDIA LIMITED

'DREDGE HOUSE', PORT AREA,
VISA KHAPATNAM – 530 001



TENDER NO. DCI/TECH/BH-1/12/2020-21, DT: 21.05.2020
DUE DT: 04.06.2020

FOR

DRY DOCK AND AFLOAT REPAIRS OF
DCI DREDGE- BH 1



DREDGING CORPORATION OF INDIA LIMITED
VISAKHAPATNAM

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10	Undertaking of Shipyard
11	Shipyard Qualification Template (Part-I) and Technical Qualification template (Part-II)- Annexure-I
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SCHEDULE-I
GENERAL TENDER CONDITIONS

01. METHOD OF PREPARATION OF QUOTATION:

Kindly ensure compliance with the following points, while preparing the price bid:

- (a) Please quote all works as it is specified in our specification without any exclusion, deviation or qualifying remarks.
- (b) Please do not assume anything on your own as assumption can differ from Yard to Yard, making proper comparison difficult. In case of any doubt or any additional clarification are required, please contact us before submitting your quotation.
- (c) Yard shall consider all the notings specified under the "Annexure to Finance Bid"
- (d) Grand total price of the quotation, along with total repair time should be indicated in the beginning of the quotation.
- (e) Quotations for each item should include access work, if any, cost of staging, temporary lighting, cleaning materials and ventilation for carrying out work where ever required.
- (f) The second copy of the Tender provided, shall be utilized for submission of quotations by the Yard.
- (g) The tenderer to strictly quote for all items in the document as provided on the website only. If the tenderer fails to quote for any item and such action is observed at any stage, such tender will not be considered and will be rejected.

02. TENDER RATES:

Rates should be quoted against each item. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected. The Group wise total should be indicated both in figures and words. If there is discrepancy between words and figures, the amounts in words will prevail. The rates are to be quoted strictly as per the format and no deviations from the tender terms and conditions shall be accepted.

03. CORRECTIONS IN TENDER:

Any corrections in the tender documents shall be supported by signature of the Tenderer and total corrections made should be indicated. Fax / E-mail offers will not be considered and shall be rejected. The language used for all correspondence in the tender documents shall be English.

04. PERFORMANCE FACTOR:

The Performance Factor for the new yard will be considered as 1.0 and other yards (who were executed DCI vessel's dry dock repairs), the Performance Factor will be arrived at by dividing the actual number of days taken by the yard with the contractual number of days in the immediate preceding dry-dock repairs (average of last 3 projects) excluding on account of DCI and force majeure.

05. COUNTER CONDITIONS:

Tenders with counter conditions shall be summarily rejected. However, cost quoted against any item or part of item stated to be additional work scope (which is beyond DCI work scope) if quoted by the yard, shall not be considered as counter conditions. Cost quoted against items of work scope shall be considered and will be taken while evaluation of tenders.

06. REJECTION OF TENDERS:

DCI reserves the right to reject any or all the tenders without assigning any reason. DCI shall reserve the right of accepting any quotation lowest or otherwise for whatsoever reason and its decision in this regard will be final.

07. METHOD OF EVALUATION OF TENDER:

The total evaluated cost (S. No: (i)) will be considered for arriving at the lowest Tenderer (L-1) as per details below:

Sl.No	Item	
(a)	Basic Repair Cost	XXX.XX
(b)	Standing cost of the vessel per day	Rs.600000
(c)	DCI estimated days	50 days
(d)	No. of days quoted by the yard	XX days
(e)	Item (d) X Performance factor (P.F)	XX days
(f)	Item (e) X standing cost	XXX.XX
(g)	Passage time = to and fro from the repair yard (No. of days)	XX days
(h)	Voyage cost = Item (g) x (Standing Cost per day)	XXX.XX
(i)	Total Evaluated Cost: (a + f + h)	XXX.XX

For the purpose of evaluation of Tender the following shall be considered:

- I. Average speed of the vessel during the voyage period shall be considered as 5 knots/hour.
- II. Since BH-1 is dumb dredger, the speed of the Vessel and fuel consumption are not considered for evaluation. However, for the purpose of evaluation of tender " Voyage Time of Tow" towards towing of Dr BH-1 with suitable Tug will be considered.
- III. The dredger is presently in Visakhapatnam and after completion of repairs the dredger will be deployed at Visakhapatnam. (Actual location may vary as per operational requirement).
- IV. For shipyards submitting the bid in foreign currency, if any, the financial evaluation will be carried out by considering currency conversion rate in Rupees as of tender opening date (Technical bid) specified in NIT.
- V. In case if yard quotes less repair duration than DCI's estimate, DCI estimated days will only be considered for the purpose of evaluation. However, award of contract for successful bidder will be as per the quoted duration.
- VI. Agency/husbandry services charges submitted by the yard, budgetary cost of paints will not be considered for the purpose of price evaluation.

08. PROCEDURE FOR AWARDING WORKS:

The awarded scope of work will be reviewed by Master/ CEO as per actual condition at the time of docking (Ship not required to raise DL cum WO for tender scope additionally).

If any Additional jobs / deletions or change in work identified during inspection, the same shall be undertaken by yard on the basis of Additional work Requisition issued by Master / CEO with due approval of Attending Superintendent. After satisfactory completion of works, Yard has to obtain work done certificates (in prescribed format) duly signed by Master/ CEO of the Vessel and counter signed by Attending Superintendent. The original signed work package, additional works are to be submitted in 4 copies along with invoice (ONE ORIGINAL with Original Invoice & 2 COPIES along with duplicate Invoice and ONE COPY to the dredger) to be submitted to DCI Head Office along with a paint guarantee certificate from OEM wherever required. In the circumstances requiring urgent repairs, even letter/fax/e-mail communication/ in lieu of work order will be issued followed by confirmatory work order duly sanctioned by the Competent Authority.

09. ADDITIONAL WORKS:

- a) Any additional works entrusted by the Owner, shall be carried out by the tenderer, subject to the variation clause. In respect of such works where rates are not available in the tender, the rates payable shall be on "Cost Plus" basis for which details of material used and manpower employed shall be indicated in the Work Done Certificate.
- b) For quoted items of work, if the quantum is actually different from that indicated in the specification, the cost would be calculated on pro-rata basis.
- c) Additional quotations (which are not covered in original scope of work package/NIT) of yard will be considered against the additional jobs, which are must be approved and awarded by attending superintendent (AS), for settlement claims by DCI.
- d) Our Attending Superintendent will sanction additional jobs as required. Work Done Certificate (WDC) will be certified by Master/ Chief Engineer Officer of the vessel along with Attending Superintendent. Yard has to submit additional quotes against additional jobs and get approved by Attending Superintendent.

10. OWNER APPROVED SUB-CONTRACTORS:

Owner's approved OEM Service personnel are to be allowed to work onboard the Vessel during the repair period on the mutual understanding that they would comply with Yard's procedures and requirements.

11. REPAIRS INVOLVING CLASS:

Wherever the repairs involving classification Surveys are to be carried out, same will be done under the Supervision and as per the recommendations of the IRS. Surveyor fees for repairs will be paid by DCI.

12. AREAS FOR BLASTING:

The areas indicated for grit blasting and grit sweeping, are only estimated areas which are subject to increase or decrease after actual inspection by the Owner's representative.

13. SUPPLY OF PAINTS:

- a) Paint – OEM Certificate of guarantee for 36 months (Underwater) to be issued by Yard.
- b) All paints shall be supplied by the Shipyard and are to be applied by airless spray. Airless spray machines shall be capable of generating sufficient pressure to fully atomize heavy coatings.
- c) All paints are to be applied only on clean and dry surfaces.
- d) Care should be taken with regard to allowable temperature and humidity condition which are to be strictly observed.
- e) All coatings are to be smoothly applied free from sags and runs.
- f) For paint coatings, the specified minimum thicknesses are to be strictly adhered to.
- g) Deficiencies in film thinness are to be made up prior to the application of final coat in order to avoid patched appearance.
- h) Painting job of hull, underwater shell are to be undertaken as per the guidance of paint Manufacturer and their Service Engineer.

14. STEEL RENEWAL:

All steel renewals as per the Surveyor's recommendation and as per ultrasonic thickness (UTG) readings are to be countersigned by the Surveyors before and after repairs. The relevant reports are to be submitted to the ship's staff in three copies. (Consider specific Weight of steel 7.85 gms/Cu.Cm only)

15. ULTRASONIC GAUGING:

As soon as the vessel enters dock, the ultrasonic thickness gauging (UTG) of the ship's hull, decks, tank tops, suction tubes etc., is to be taken, readings to be plotted as per respective drawings and submitted to Class Surveyor, Attending Superintendent and Ship staff for record and reference.

16. REPAIRS TO FIRE MAIN LINE:

When repairs are undertaken to the fire main line, Yard is to ensure that section of the pipe line under repairs is isolated from ship's fire main line. Period required for isolating the line, when no water pressure will be available in the fire main, is to be kept to the minimum and the duty officers/ duty Engineer is informed when this work is undertaken. During this period of repairs to fire main line, alternative fire fighting arrangements should be made for the area where water has been cut.

17. REMOVAL OF DEBRIS:

Yard shall arrange removal of debris, scrap and dirt generated from the vessel, arising out of repairs, at regular intervals during the repair. This will be on Yard's account and no separate payment will be made for this.

18. SPARES AND SCRAP:

For certain items it has been indicated in the Schedule-IV that the rates are for Renewals with ship's supply of spares. In such cases where supply of spares could not be arranged by the Ship/ Dredger/ Vessel, the same shall be supplied by the repairer and the actual cost plus overhead i.e., 10 % mark-up will be paid and reasonable supply time will be allowed by the Corporation. All Steel/ Ferrous metallic scrap generated during repair shall be cleared and disposed off by the firm at their risk & cost. Further, an equivalent amount towards ferrous scrap is to be reimbursed to DCI (The same to be quoted in Group-C on Kg/LOT basis). In case, DCI requires any of the scrap items generated out of the repairs, will have the right to take back for its use. Yard will not have any claim on such items. Non-Ferrous metallic scrap generated out of the repairs shall be the property of DCI and will be cleared within 90 days from the date of delivery of DCI.

19. FUEL, LUB OIL AND SLUDGE:

Emptying the fuel/ lube oil tanks and gas free inspection are to be carried out by the Shipyard. Wherever sludge is removed from the oil tank/ ballast, the quantity of mud/ sludge removed, should be witnessed by the ship's officers and quantity assessed to be got approved from the Master / C.E.O. The sludge is to be disposed off to the shore by the Yard for which DCI will pay as per quoted rate.

20. DOUBLE BANKING:

In case the vessel is double banked, Yard has to make sure that adequate crane facilities are available so that the work is not hampered.

21. FIRE WATCH:

Fire watchmen should wear distinctive uniform which should be made known to the ship's officers on arrival. Fire watchmen are to report to Chief Officer and Chief Engineer Officer at least once every day. The Fire Watchmen should follow procedures as per ISM Standards.

22. TIME REQUIRED FOR COMPLETION OF REPAIR WORKS:

Total repair time quoted by the Yard should be in continuous running days, including work on Saturdays, Sundays and Local & National holidays, that would be required for completing the work, from the day the Vessel arrives at the repair Yard as decided by Attending Superintendent.

- a) In case of any statutory holidays when the Yard cannot undertake repair work, also shall be reckoned in the total time quoted. Yard should also take into account the prevailing weather conditions, for assessing the total repair period.
- b) While quoting, time required to complete repairs (including variation clause), same should be given as follows:
Total time required for Repairs: --- Days comprising of both Dry dock and at Repair berth (Wharf).

23. DRY-DOCKING PERIOD:

- a) Dry docking period shall be reckoned from the date as decided by Attending Superintendent (AS) basing on arrival of the Vessel at the Yard till the date of sailing of the Vessel from the Yard, after satisfactory completion of repairs and machinery / dredging trials.
- b) Arrangement are to be made to commence afloat repairs (or) to dry dock the Vessel within two days on arrival at the Yard and no allowance will be given for keeping the Vessel idle before dry docking.
- c) After completion of all repairs, yard shall complete and show all satisfactory sea trials within Four days. Time allowed towards Sea trials is on DCI account.
- d) Vessel stay at Yard for re-validation of Statutory Surveys certification is on DCI account and delays (if any) for closure repairs by the yard shall be on account of Yard.

24. BAR CHART:

A detailed Bar Chart / Gantt Chart (Level-III) for dry dock repairs shall be submitted along with technical bid. Revised bar charts if any are to be submitted by the yard from time to time to evaluate the progress of work.

25. PERIODIC REVIEW:

The progress of all the works will be reviewed and discussed periodically according to the bar chart in presence of Master/Chief Engineer Officer of the Vessel and Attending Superintendent. The minutes of meeting are to be recorded.

26. UNSATISFACTORY PROGRESS OF WORK:

If it is noticed by the authorized officer of the Corporation that either the work is not being executed or the progress is not satisfactory, the Corporation reserves the right to entrust the balance work to some other party at the sole risk and cost of the Tenderer. This is in addition to the L.D. clause provided under Clause No. 9 of the Special Conditions of the tender at Schedule-II.

27. TRIALS:

All items in the specifications, repaired by the Yard, should be tested to the satisfaction of ship's staff. Cost & Time towards Calibration, Pressure Testing, purging, hose testing Dye penetrate test, Megger test, lowering tubes, gantries, cylinders etc. are generally included in the Yards quotations. However on completion of all repairs, trials of equipment & systems to conduct in dock basin, then to offer satisfactory dredging trials.

28. REPAIR GUARANTEE:

The Tenderer should strictly adhere to the time schedule, quality and stand guarantee for all dry dock repairs carried out onboard the dredger for a period of 90 days. Any repair required within this period shall be rectified by the tenderer at their own risk and cost.

29. SAFETY PRECAUTIONS:

It shall be the responsibility of the Yard that when the sub-contractors are working onboard our Dredger/ship, necessary safety precautions against accident/ fire/ damage to ship's property/ personnel must be followed and to avoid such incident. DCI shall not be anyway responsible for such incidents (if any) and Yard will only be fully responsible. The yards are required to follow ISM and ISPS procedures and continue the repair work.

30. SPECIAL TERMS:

All Yards are required to strictly adhere to the following. No deviations or counter offers to these special conditions will be accepted and offers not confirming to these special conditions shall be rejected.

- a) The work package indicated in our repair specifications are likely to increase by 30% for the same or similar defect list per every item quoted and also shall be carried out in the same quoted time. No time over run will be allowed for this. However, vessel shall indicate all the additional jobs immediately on her arrival at the yard / after opening the equipment / on receipt of UTG reports.
- b) Obtaining Gas-free Certificates, Man entry Certificates, Painting & Welding permission and any other statutory certificates required for carrying out work onboard will be the responsibility of the Yard.
- c) Because of the very nature of work, the Dredger is likely to arrive at the Yard with mud and with stern tube leakage's. Such conditions are to be accepted by the Yard and no penalty will be levied to DCI. Precautions with regard to oil leakage through Stern Tube Seals and pollution of the environment must be taken by the Shipyard and as per the statutory requirements, rules and regulations of the Territory where the Yard is located. DCI will not accept any liability whatsoever in this regard.
- d) The Attending Superintendent reserves the right to cancel any scope of work.

31. QUALITY ASSURANCE:

Since quality of workmanship is of utmost importance the yard should strive to achieve the same by following a formalized Quality Assurance Plan (QAP). A two tier inspection plan shall be followed as a part of QAP. Each equipment, system or fitting is required to be inspected by appropriate personnel of the yard first before presenting the same for inspection of vessel staff. After inspection, the yard shall submit to vessel staff in writing the parameters checked and results thereof. A list of equipments, systems and fittings and format thereof for which written QAP is required to be submitted by yard is to be finalized in consultation with Master/ Chief Engineer/ Attending Superintendent within one week of the Vessel's arrival at the yard.

32. FORCE MAJEURE:

Force Majeure Condition would mean Gale, Heavy Rain and Acts of God, as certified by the Attending Superintendent. Yard has to submit weather report against Force Majeure Conditions as documentary evidence.

33. SECURITY CLAUSE:

While evaluating the tenders, due regard would be paid to national Defence and security considerations. The yards are required to follow ISPS Procedures during the period of Stay / Repair / Wharfage.

34. APPLICABILITY OF GENERAL AND SPECIAL TERMS AND CONDITIONS:

All the General Tender and Special Conditions reflected in the Tender Notice shall also form part of this contract.

35. LODGING AND BOARDING:

Suitable Executive accommodation (i.e. Lodging and Boarding facility of good standard) for Attending Superintendent / Officials (minimum 3 Persons) is to be provided by the Yard near / within the Yard premises at Yard's expenses.

36. PREQUALIFICATION CRITERIA:

- a) Tenderer should have their own Dry Dock / leased Dry dock with full repair infrastructure and relevant experience in Dredgers repairs. In case repair firm submits dock / slipway allotment letter of port authorities to be enclosed along with Technical Bid. Repair firm should dock the vessel within week on placement of work order failing which, L.D & penalty clause will be applicable as per contract.
- b) The tenderer should have experience in dry dock repairing at least one similar type of vessel /500 Cu.M capacity of cutter suction / Inland cutter of during the last 5 years (Necessary Proof to be enclosed along with Technical bid).
- c) Shipyard Qualification Template (Part-I) and Technical Qualification template (Part-II) to be filled enclosed and necessary documents to be attached as per Annexure -I. The bidders will be qualified based only on the Technical Qualification template (Part-II).
- d) Dock slot to be provided as per DCI requirement.
- e) The bidding Shipyard should have positive net worth during the immediate preceding financial year. In case an Indian shipyard does not have positive net worth as required during the immediate preceding financial year, it should provide a Letter of Comfort from Scheduled Banks/reputed lending institutions indicating to provide necessary financial support (at least 50% of the value of the contract) to execute the project as per format prescribed in Annexure-II.
- f) Average annual financial turnover during the last 3 years ending 31st March of the previous financial year should be at least 30% of the estimated cost.
- g) 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: -
 - a. Three similar completed works costing not less than the amount equal to 40% of the estimated cost.
or
 - b. Two similar completed works costing not less than the amount equal to 50% of the estimated cost.
Or
 - c. One similar completed work costing not less than the amount equal to 80% of the estimated cost..

SCHEDULE -II

SPECIAL CONDITIONS

01. TENDER DOCUMENT COST:

The Tenderer shall deposit cost of tender documents of Indian Rs. 6000.00 (including taxes/GST) into DCI account No: 35833070000014, IFSC code: SYNB0003583, MICR code: 530025003, Syndicate Bank, DCI Branch, Visakhapatnam and to enclose evidence of receipt along with Technical Bid documents, without which Tenders will be rejected.

02. EARNEST MONEY DEPOSIT (EMD):

- a) The tenderer shall deposit Earnest Money deposit of Indian Rs. 4,43,000 (Indian Rupees Four Lakhs forty three thousand only) into DCI account No: 35833070000014, IFSC code: SYNB0003583, MICR code: 530025003, Syndicate Bank, DCI Branch, Visakhapatnam and to enclose evidence of receipt along with Technical Bid documents, without which Tenders will be rejected.
- b) Unsuccessful Tenderers EMD will be discharged or returned as promptly as possible, but not later than after the expiration of the period of Tender validity as prescribed by DCI.
- c) The successful Tenderers EMD will be discharged up on the placement of work order and furnishing the Performance security.
- d) The earnest money deposit may be forfeited:
 - I. If a Tenderer:
 - a) Withdraws its tender during the period of tender validity specified by the tenderer in the tender.
 - b) Does not accept the correction of errors
 - II. In the case of a successful tenderer, if the tenderer fails:
 - a) To sign the work order
 - b) To furnish performance security

03. PERFORMANCE SECURITY:

With in 10 days after receipt of the Work order of award of the Dry dock repairs, the tenderer shall furnish Performance Security to DCI. The proceeds of the Performance Security shall be payable to the DCI as compensation for any loss resulting from the Bidders failure to complete its obligations under the contract. A sum equal to 10% of the accepted value of works shall be deposited by the tenderer by demand draft or by way of irrevocable, unconditional bank guarantee from Scheduled / Nationalized Indian bank as performance security deposit in favor of Dredging Corporation of India Ltd, payable at Visakhapatnam. Alternatively EMD shall be converted as part of Performance security deposit and balance amount shall be with held while settling the yards invoice. Performance security deposit will not carry any interest. The performance security will be discharged by DCI and returned to the tenderer not later than 60 days following the date of completion of the tenderers performance obligations including any warranty obligations.

04. TAXES AND DUTIES:

- a) All taxes, duties, levies etc., of any kind levied by any Authority (exclusive of GST), shall be borne by the Tenderer and the tendered rates will be deemed to be inclusive of all such liabilities.
- b) Indian Yards shall quote their tendered rates, excluding GST. GST will be reimbursed to Indian Yards, at actuals, on submission of proof of payment by them.
- c) While evaluating the tenders to arrive at Lowest Tenderer (L-1), the basic repair cost quoted by Indian Yards, excluding GST shall be considered.

05. DISCOUNTS:

Kindly ensure compliance with the following points when the revised / final bids are being offered.

- a) No discount should be mentioned in the Technical Bid.
- b) Any discount offered must be specified as a percentage to the quoted rate and not as a lump sum and should be mentioned in the Price Bid only.
- c) Similar discount should be applicable on all additional items (up to 30%) originating from quoted items or otherwise.
- d) Percentage of discount should not be changed irrespective of amount of work done out of quoted items.

06. VALIDITY OF QUOTATION:

The Tenderer should keep open the validity of the tender for 90 days from the date of Price Bid opening. The Tenderer shall also keep the validity open for another 30 days in case a request in writing by DCI is made before expiry of initial validity period.

07. SUBMISSION OF REPAIR BILL:

It should be ensured that the repair bill (hard copy in triplicate + One soft copy) complete in all respects (Yard invoice, Work done certificate, DL cum WO and all supporting documents of claims) is submitted within 30 days after completion of repairs by the Yard to our Head Office at Visakhapatnam, for scrutiny and payment.

08. PAYMENT TERMS:

Our organization being a Public Sector Undertaking of Government of India, the Corporation has to comply with Government procedures for release of foreign exchange. Our payment terms and conditions are as follows:

- a) After preliminary scrutiny, about Fifty percent of the admissible invoice value will be paid within one month after receipt of invoice, complete in all respects, by DCI.
- b) Balance admissible payment will be made within Three months thereafter.
- c) Before releasing final payment after work is completed the yard is required to submit a No Due certificate to DCI with out prejudice to the claims raised by the yard before seeking the release of the final bill and the yard not entitled to invoke arbitration in respect of any claim that is not raised before the issue of a No claim or No Due certificate.
- d) Payments shall be made through E-Transfer, so the Bidder shall submit Bank account details along with the tender for Electronic transfer of funds by DCI.

09. LIQUIDATED DAMAGES:

- a) In case the completion of the Repair Works of the Vessel is delayed due to any reason whatsoever (except due to major additional jobs and force majeure situations), no payment towards General Service Charges will be made to the Yard for the delayed period.
- b) In case of time overrun, the Attending Superintendent shall finalize the number of days to be reckoned for LD and for Force Majeure (if any) with consent of the Yard.
- c) LD shall be levied for delayed delivery of the Dredger on standing cost of the Vessel value for each day of delay subject to a max. of 10% on the final payable invoice value. LD will be leviable in addition to penalties / disincentive, if any, as stipulated in the tender.

10. ARBITRATION:

Should any dispute or difference arise between the Corporation and the Shipyard in connection with this Contract, or as to the rights and liabilities of the parties hereto, it shall be referred to Arbitration. Each party shall appoint an Arbitrator and the Arbitrators so appointed shall appoint an Umpire and the award of the Arbitrators or the Umpire, as the case may be shall be final and binding upon the parties hereto. The Arbitrators shall give a reasoned award. Such Arbitration shall be held at Visakhapatnam, India. It shall be in accordance with provisions of the Indian Arbitration Act, 1996 or any statutory modification or re-enactment hereof. The Arbitrator(s)/ Umpire may from time to time with the consent of the parties, enlarge the time for making and publishing the award.

11. INCENTIVE AND DISINCENTIVE:

- a) The Yard shall complete entire scope of dry dock repairs within the stipulated contract period of ----- days (including variation included in Sch-I, clause-30).
- b) There will be an incentive payable to Yard for early completion in delivery @ Rs.50,000/- (Rupees Fifty thousands) per day.
- c) In case, Yard fails to complete the job within stipulated contract period, DCI will levy disincentive of Rs.1,00,000/- (Rupees One Lakhs) per day of delay.

12. LEGAL PROCEEDINGS:

Jurisdiction, for legal proceedings, if any, shall be at Visakhapatnam, Andhra Pradesh, India.

13. All repairs during the Dry-dock will be carried out under the Supervision of IRS. IRS Charges shall be paid by DCI.

14. The bidder will give an undertaking that they have not made any payment or illegal gratification to any person/ authority connected with the bid process so as to influence the bid process and have not committed any offence under prevention of Corruption Act in connection with the bid.

15. The bidder shall disclose any payments made or proposed to be made to any Intermediaries (agents etc.) in connection with the bid.

16. Yard shall give an undertaking that entire dry dock repairs (including variation of 30%) will be completed within the quoted / contract period.

17. DCI is certified for ISO 9001: 2015 (Quality Management system), ISO 14001: 2015 (Environment Monitoring system). International Safety Management System (Safety Management System) and ISPS code. The Yard and their sub-contractors should comply the applicable requirements pertaining to the above standards while executing works.

18. AGENCY CHARGES: Agency husbandry charges (Details placed at Annexure-III) are to be engaged in case of foreign yards, if found L-1 in the tender. The charges of Agency/ Husbandry shall be paid at actual cost plus 10 % (mark up/Overhead charges). DCI reserves the right to defer / cancel the agency / husbandry services as per requirement. Payment terms applicable as per Sl.No.8 above.

19. Integrity Pact (IP): Shall cover this tender throughout its various phases, and IP would be deemed as a part of the contract through an appropriate provision. The bidders should sign and submit an "Integrity Pact" as enclosed in Annexure-IV along with the Technical bid in a separate envelope superscripted "Integrity Pact". Bids not accompanied by duly signed "Integrity Pact" shall be liable for rejection. IP would be implemented through the Independent External Monitor (IEM) for this tender. The successful tenderer will execute the Pact with Dredging Corporation of India Limited after award of Work.

SCHEDULE – III

MAIN PARTICULARS OF DCI DREDGE BH1

1.	NAME OF THE VESSEL	:	DCI DREDGE BH1
2.	PORT OF REGISTRY	:	MUMBAI
3.	CLASSIFICATION SOCIETY	:	INDIAN REGISTER OF SHIPPING
4.	BUILDER	:	DE DONGE FLUSING YARD BV
5.	YARD NO.	:	5030
6.	LENGTH OVERALL	:	58 MTRS
7.	L.B.P.	:	55.68 MTRS
8.	BREADTH MOULDED	:	20.30 MTRS
9.	BREADTH	:	16 MTRS
10.	GROSS TONNAGE	:	977
11.	NET TONNAGE	:	293
12.	MAIN ENGINES	:	QSK 50 Cummins
13.	IMO NO	:	IR 42342
14.	OFFICIAL NO	:	M-7704
15.	CALL SIGN	:	NIL
16.	YEAR OF BUILD	:	2011

SCHEDULE-V

(Tenderers are advised to offer their deviations on the tender conditions, if any, along with the tender under the following Performa without fail. In case there is no deviation to the DCI's tender conditions, this Schedule may be submitted with the tender as NIL DEVIATION)

LIST OF DEVIATIONS

Tender for Dry Dock and lay-up repairs of DCI Dredge BH1.

Sl. No.	Clause / Sl.No. of Tender condition on which deviation is made	Description of DCI's clause	Description of proposed clause	Reasons for deviation
1				
2				
3				
4				
5				
6				

(Signature of the tenderer with stamp)

Date:

SCHEDULE – VI

GUIDELINES TO YARD WITH REGARD TO SUBMISSION OF INVOICES

To facilitate prompt and timely settlement of the invoices of the Yard, following guidelines are issued:

1. The awarded scope of work will be reviewed by Master/ CEO as per actual condition at the time of docking (Ship not required to raise DL cum WO for tender scope additionally). If any Additional jobs / deletions or change in work identified during inspection, the same shall be undertaken by yard on the basis of Additional work Requisition issued by Master / CEO with due approval of Attending Superintendent. After satisfactory completion of works, Yard has to obtain work done certificates (in prescribed format) duly signed by Master/ CEO of the Vessel and counter signed by Attending Superintendent. The original signed work package, additional works are to be submitted in 4 copies along with invoice (ONE ORIGINAL with Original Invoice & 2 COPIES along with duplicate Invoice and ONE COPY to the dredger) to be submitted to DCI Head Office along with a paint guarantee certificate from OEM wherever required. In the circumstances requiring urgent repairs, even letter/fax/e-mail communication/ in lieu of work order will be issued followed by confirmatory work order duly sanctioned by the Competent Authority.
2. Work Done Certificates (WDC) for the Engine side and Deck side, as the case may be, duly signed by the Master or CEO and counter signed by the Attending Supdt., are to be submitted in 4 copies, (one ORIGINAL & 2 COPIES along with Invoice and one COPY to the dredger). Please ensure that on the original of the work done certificate, rubber stamp "ORIGINAL – FOR PAYMENT" should be affixed and on all other copies the rubber stamp "COPY – NOT FOR PAYMENT" should be affixed. The description of job in WDC should be in-line with DCI work scope mentioned in work package. The sample form of WDC is placed at Annexure-IV.
3. Invoice of the Yard for dry dock repairs (in Excel format) may be submitted in triplicate along with the original work done certificate marked as "ORIGINAL – FOR PAYMENT". Copies of WDC may be attached with the copies of the Invoice. Photostat copy of WDC or carbon copy duly marking "original for payment", if submitted with the Original of Invoice will not be considered for payment.
4. Please ensure that one SOFT COPY (CD) of the Invoice in Excel format is also submitted along with the original invoice.
5. Sl. No. in work package (as given in NIT) is DL number in serial. DL number (Ref/Sl. No. in work package) should be clearly indicated on all WDC for verification & easy identification.
6. Scrutiny of Invoice will be made Group-wise. Therefore, Invoice should be raised as per Group in the Work Package and the supporting WDC should be attached accordingly so as to arrive at the total expenditure against each Group.
7. Date of Commencement and Completion in respect of every repair job (Group-wise) may be indicated in the WDC.
8. Details of materials supplied, if any, to the dredger through "Regular Material Requisition (RMR)" raised from the Dredger are to be indexed in tabular form showing the Description, Quantity supplied, etc. and the receipt of acknowledgement by Master or CEO as the case may be and Attending Supdt may be submitted with the Invoice.

9. Original Passed invoice or Proof of payment & Yard certified copy of Bill towards purchases, if any, over and above Indian Rs 10,000/- for the purchased items is to be submitted along with the Invoice of the Yard.
10. Details of additional works, if any carried out, beyond the scope of original Work Package, are to be submitted indicating "ADDITIONAL WORKS" and giving full details of additional work order reference DL No. & date, WDC, etc. (Example- ADL (Deck/Engg) No. -001/ Dt.....)
11. Details of repairs if any carried out by sub-contractors of the Yard are to be separately indicated in the WDC with approval of Attending Supdt and ship staff. The same should be submitted along with the Invoice of the Yard.
12. While preparing the invoice, care should be taken to consider the "NOTES" at ANNEXURE TO FINANCE BID.
13. Please ensure that WDC do not contain any adverse remarks / observations of MASTER / CEO. Such remarks should be sorted out before vessel leaves the yard. This will avoid nonpayment/ subsequent correspondence and delay thereof for settlement of the Invoice.
14. Please indicate the quoted rates against each amount claimed in the Invoice – Item wise and Group-wise to facilitate easy scrutiny.
15. Details of services rendered by OEM may be submitted along with the original passed invoice or Proof of payment & Yard certified copy of bill, time sheets duly signed by MASTER or CEO as the case may be and countersigned by Attending Superintendent, other wise claim will not be entertained. OEM service engineers to be arranged by the yard with DCI approval. The Service engineer charges will be paid to the yard with 10% mark-up (i.e., actuals + 10 %).
16. Cost of materials including paint incorporated in the work as reflected in work done certificate (in case of material purchase of above Rs. 10,000/- value made, supporting vouchers/bills i.e., original passed invoice or Proof of payment & Yard certified copy of bill along with proof of payment should be enclosed. Extra 10% on actual material cost only will be paid towards overhead handling / transportation and other incidental charges etc.
17. Lodging and Boarding
Suitable Executive accommodation (i.e Lodging and Boarding facility of good standard) for attending superintendent/ officials (minimum 3 persons) is to be provided by the yard near/within the yard premises at yard expenses.

SCHEDULE – VII
DETAILS OF THE SHIPYARD
(Please furnish copies of documents wherever applicable)

1. a) Name of the yard with full address including phone/e-mail / fax, etc.
b) Names & addresses of key persons to be contacted and their qualification, experience, etc.
2. a) Constitution of the firm :
b) Act under which registered :
c) Date of commissioning of the firm
d) Date when dry docking & repairs of ships / dredgers commenced
3. Financial background:
a) Names & addresses of banks with whom the accounts are held :
b) Maximum amount of work order carried out on any dredger during the last three years.
c) Statement of accounts of the firm for the last 3 years with certified published annual report showing the turnover and financial result
d) Whether the firm avails assistance from any yards / Government / other Agencies with full details
4. No. of dry docks available for taking large size ships / dredgers.
5. Total area of each yard (indicating separately the details of workshop, dry dock, Slipway, etc). Details of the firm indicating various workshop facilities, Fabrication shops, slipway / dry dock for new construction, etc. indicating their dimension and capacity.
6. Availability of bonded warehouse and its location, indicating the total area and facilities available
7. Details of dry dock repairs of dredgers / ships / any other vessels carried out in your yard for the past 5 years indicating the following particulars (Please use separate sheet for each vessel and furnish copies of documents) (Please provide this information only for larger ships / dredgers only)
 - a) Name of vessel
 - b) Name of the owner
 - c) Date order
 - d) Contractual repair period
 - e) Date of commencement of work
 - f) Date of delivery as per contract
 - g) Actual date of delivery
 - h) Classification
 - i) LOA
 - j) Breadth moulded
 - k) Depth moulded
 - l) Draft loaded
 - m) GRT
 - n) NRT
 - o) Suction pipe internal dia.
 - p) Details of dredging equipment (type, make & manufacturer's address)
 - q) Details of Propulsion equipment (type, make & manufacturer's address)
 - r) Details of navigational equipment (type, make & manufacturer's address)
 - s) Details of auxiliary equipment (type, make & manufacturer's address)
8. Availability of Service Engineers of different OEM and manufacturers of various machinery / equipment.

9. Total infrastructural facilities (crane capacity, pumps capacity, flooding time, etc.) owned by you and available at the yard indicating their capacity, make, etc. and place of operation.
10. Details of special tools if any in your yard relevant to dry dock repairs of dredgers
11. Details of total man power indicating the qualification & experience of key persons.
12. Availability of spares of OEMs at or nearer to the yard.
13. How many days notice normally do you need to arrange dry dock repairs of a dredger? Are there any conditions?
14. Do you have facility for emergency dry docking of vessels at short notice? (Please give details)
15. Details & availability of Classification Society near to the yard
16. What are your guarantee / warranty terms for dry dock repairs?
17. What are your general terms & conditions for dry dock repairs of vessels?
18. What are your payment terms?
19. Names & address (including phone numbers, e-mail etc) of agents for services?
20. Standard tariff of your yard for various works
21. Do you provide any bank guarantee for guarantee works?
22. Shore reception facilities
23. Scrap disposal arrangements

SCHEDULE - VIII

CHECK LIST

Tenderers are requested to take into account of the following before submission of the tender for dry dock and lay-up repairs of DCI DREDGE BH1

<u>Sl No.</u>	<u>Action</u>	<u>(Yes / No)</u>
1	Please read and understand full set of tender documents	
2	Visit the dredger, if required, and understand the nature of repairs to be carried out.	
3	Sign and stamp all pages of the tender documents by the authorized signatory. Mention name & designation of the signatory on the tender.	
4	Make 2 sets of tender documents i.e. Part-I - Technical Bid and Part-II - Financial Bid (Price Bid)	
5	Technical Bid should contain following: a) A covering letter from the yard stating any issue which has bearing on Financial Bid; List of deviations, if any; Acceptance of all DCI's tender conditions; proposed period of repairs in the dry dock and in afloat condition; availability of dock space; and validity of tender. b) Schedule-I (General Tender Conditions) c) Schedule-II (Special Conditions) d) Schedule-III (Main Particulars of the dredger) e) Schedule-IV (Work Package) f) Annexure to Schedule-IV duly filled in the number of days required for completion of all repairs, etc) g) Schedule-V (List of Deviations, if any) h) Schedule-VI (Guidelines) i) Schedule – VII – Details of yard. j) Schedule – VIII – Check List. k) Undertaking of shipyard l) Shipyard Qualification Template (Part-I) and Technical Qualification template (Part-II) m) Format for comfort letter from Bank. n) Payment receipt in proof of Tender document cost o) Payment receipt in proof of Earnest Money Deposit	
6	Financial Bid should contain the PRICES (Schedule-IV and Annexure to Schedule-IV duly stamped and signed); and Percentage of Discount offered, if any.	
7	Consider 30% increase in scope of work over and above jobs specified in Schedule-IV towards unforeseen jobs.	
8	Rates should be quoted in figures and words in the Financial Bid.	
9	Rates offered shall include all Taxes, duties, etc. of any kind, but excluding GST.	
10	Corrections on the tendered rates should be supported by signature of the tenderer (Clause 03 of GTC).	
11	No COUNTER CONDITIONS are offered. (either in Technical & Price bids)	
12	Put both Technical Bid and Financial Bid in different envelopes and superscribe on the envelope TECHNICAL BID and PRICE BID as the case may be and seal both the envelopes. Put both the above envelopes in another envelope, seal the same superscribe on the envelope "Tender No: DCI/TECH/BH-1/12/2020-21, Date: 21.05.2020 and due date: 04.06.2020".	
13	Please ensure the tender reaches the addressee before the closing time of the tender.	
	<u>PLEASE AVOID</u>	
14	Counter-conditions as it may attract rejection of tender	
15	Mentioning rates in the Technical Bid	
16	Corrections of the prescribed tender documents as it will attract cancellation of tender	

UNDERTAKING

Tender No. DCI/TECH/BH-1/12/2020-21 dated 21.05..2020
Dry-Dock repairs of DCI Dredge BH1

GCC- SCH-I, Clause No 1 G: As per the Tender requirements, we hereby state that we have strictly quoted for all items in the document as provided on the website only. If we fails to quote for any item and such action is observed at any stage, DCI have a right for rejection of tender.

SC- SCH-II, Clause No.14: As per the Tender requirements we hereby state that we have not made any payment or illegal gratification to any person/Authority connected with the Bid process so as to influence the Bid process and have not committed any offence under the prevention of Corruption Act in connection with the Bid.

SC- SCH-II, Clause No.15: We also state that no payments have been made nor proposed to be made to any intermediaries in connection with Bid.

SC- SCH-II, Clause No. 16: We hereby state that entire dry dock repairs (including variation of 30%) will be completed within the contract period.

Signature of Tenderer & Seal

NOTE: Alternatively the details of payment made /proposed to be made may be furnished at SC- SCH-II, Clause No.15.

A) DCI estimated days for completion of DD repairs of DCI DredgeBH1 = 50 days (DD 40 days + Afloat 10 days)

B) The total cost implication for Dry dock repairs of Dredge- BH1:

Sl. No	Description	in Rs.
1	GR-A- Dock hire and Service Charges	
2	GR-B- Surface Preparation, Cleaning and Painting	
3	GR-C- Steel Plate Renewal	
4	GR-D- Bottom door repairs	
5	GR-E- Propellers, Rudders, Bow thrusters and CPP System	
6	GR-F- Engine Room Machinery	
7	GR-G- Deck Machinery, Hyd. / Obd. Valves & pipelines	
8	GR-H- Pump room machinery and dredging equipment	
9	GR-I- Electrical Equipment	
9	GR-J- Cost Plus Jobs	
10	Discount	
11	Total Amount after discount	

GROUP-A DRY-DOCK HIRE AND SERVICE CHARGES					
Sl. No.	Description	Qty.	UoM	Unit rate	Total
1	Dock blocks preparation as per docking paln				
	Drydock Hire Charges,				
	i) First Day	1	DAY		
	ii) Subsequent - 2nd to 40 th Day	39	Day		
2	Wharfage	10	DAY		
3	Assisting for docking and undocking the Vessel Est.for two time Mooring/Unmooring and line handling Est.for 4 times	2	TIME		
4	Mooring/Unmooring and line handling Est.for 4 times	2	TIME		
5	Cleaning the dock floor –				
	i) First day	1	DAY		
	ii) Subsequent Days	39	DAY		
6	Continuous Shore power supply – AC 50Hz., 3 phase, 415V/440V; 300 A, Est. for 50 KWH /Day X 15 days (@ Rs.--- per KWH)	3000.00	KWH		
	ii) Connection & Disconnection Est.for 4 times	4	TIME		
7	Fresh Water supply to refrigeration/ AC Machinery (per day per line) Braided hose – 2 lines X --- Days,	50	DAY		
	Connection & Disconnection – Est.2 line x 2 times	4	TIME		
8	Fire Patrol (Rate per head per day of 24 hrs.)	50	Rate/ Day (24 Hrs)		
9	Fire line to be kept charged (3 bar) all the time when the vessel is in dry-dock.(2 lines@ Rs.---/ Line),	50	DAY		
	Fire line – Connection & disconnection Est. for 2hoses X 2times	4	TIME		
10	Galley refuge removal and disposal, Rate per week	9	week		
11	Gas free inspection by Shipyard Personnel including blowers and necessary arrangement for ventilation.	6	NO.		
	Gas free inspection by Govt. Authorised Inspection, Permits for	6	Per tk.		
	(i) Hot work	2	NO.		
	(ii)Tank entry	6	NO.		
12	Crane charges for handling Ship's provision/stores.				
	i) up to 10 tons capacity	10	HOUR		
	ii) above 10 tons capacity ## upto 50 Ton	10	HOUR		
	iii) above 50 tons capacity ## 51 to 60 Ton	5	HOUR		
13	Fitting wooden plugs with carry away pipe on scupper pipes	6	NO.S		
14	Carry away pipes to be provided on all sea discharges to prevent flow on shipside.	4	NO.S		
15	Compressed air supply from shore main:				
	i) Compressed air supply per hose per day,	50	DAY		
	ii) Connection & disconnection per line per time per line	4	Time/ Line		
16	Ventilation Fan –				
	i) Hire charges per day per fan (15 Day X2 Fans),	15	Day		
	ii) Connection disconnection per fan / Per time	8	time		
17	Heating lamps for standstill motors are to be provided to avoid moisture accumulation on motor windings. Apx.10 Lamps	10	Day per Nos		
	f) Connection disconnection per Lamp/ light, Per time	10	Lamp/light/ Time		

GROUP-A DRY-DOCK HIRE AND SERVICE CHARGES					
Sl. No.	Description	Qty.	UoM	Unit rate	Total
	<p>NOTE :</p> <p>1) For hot work the surrounding area is to be completely cleaned and required No. of fire sentries be posted with fire extinguishers.</p> <p>2) Number of days at Sl. Nos.1 (ii), , 2, 5 (ii), 6, 7, 8, 9, 10, &15, are to be filled by the Yard as per quoted days and corresponding amount.</p> <p>3) Electricity charges for shore power supply will be paid at actuals, as charged by local electricity authority plus 10% towards service charges.</p> <p>4) Security watch if any provided during repair period will be on account of Yard only.</p> <p>5) All above Quoted cost shall be inclusive of staging, open & refit charges.</p>				
	TOTAL FOR GROUP-A:				

	GROUP-B				
Sl. No.	Description	Qty.	UoM	Unit cost	Total cost
	SURFACE PREPARATION, CLEANING & PAINTING				
1	SURFACE PREPARATION AND PAINTING OF HULL EXTERIOR & BA 800				
	i) Sigma/ International (Akzo nobel)/ Chuguku/ Hempel/ Jotun / Any other marine paints which are approved by Class may be used.				
	ii) Paints shall be procured by the yard on behalf of DCI.(Cost of Paints + 10% will be paid by DCI)				
	iii) Total cost (estimate) of paint is to be indicated separately (Purchase Vouchers are required to produce for actual Quantity of paint consumption, for settlement of Yard's Invoice).				
	iv) Only Tin free antifouling SPC with 3 years guarantee (to be arranged by Paints OEM) is acceptable				
	a) i) Hand Scrapping marine growth of hull exterior under water area including sea chest etc.	1200	SQ.M		
	ii) Wire brushing	200	SQ.M.		
	iii) Carry out Copper slag hard sweeping to SA 1.0	600	SQ.M		
	b) i) Carry out Copper slag blasting up to bare metal (SA 2.5) of vertical sides, mid ship area, aft, bottom area and other locations like excavator BA-800 etc. including all areas of Spuds (3 nos)	1200	SQM		
	c) High pressure water washing (150 bars) to remove barnacles and Sea growths.	1200	SQM		
	d) Water washing ordinary (after primer) including all decks & accommodation.	1000	SQM		
	e) Chemical cleaning of oily areas (Including Chemical supply Cost by yard)	600	SQM		
	f) Mopping with freshwater before applying antifouling and boot top black.	1200	SQM		
	g) Painting of Under water & Top areas (3 nos.SPUDS) & Other areas ## Refer below				
	i)Painting of Copper slag blasting areas of vertical, hull and all areas of Spuds (3 nos)	1200	SQM		
	ii) Blasted areas to be coated with epoxy HB paint at 50 Mic. DFT.	300	SQM		
	ii) Other areas to be coated with epoxy HB paint at 150 Mic. DFT.	890	SQM		
	iii) Apply finish coat of Topside Black (Re-coat able Polyurethane) 75 Mic. DFT.	890	SQM		
	h) Painting of under water area (Including Spud Carriage & Spud Housing)				
	i) Copper slag blasting up to bare metal (SA 2.5) of vertical and all areas of Spud carriage & Spud housing	500	SQM		
	i) Paint blasted areas with Epoxy Primer at 50 Mic. DFT	500	SQM		
	ii) Apply Tar Free Epoxy at 125 Mic. Dft at spot blasted areas only.	500	SQM		
	iii) Apply Tar Free Tie coat 125 Mic. Dft on Total area.	1200	SQM		

GROUP-B					
Sl. No.	Description	Qty.	UoM	Unit cost	Total cost
	iv) Apply Two coats of SPC. A/F (Tin free) of 125 Mic. Dft. Each Total 250 Mic DFT.	1200	SQM		
	v) Painting of ship's name in Hindi and English at P & S bow and stern port of registry and name of boom arm, IMO number at stern shipside with 2 coats of white paint.	1	LS		
	i) Painting plimsol marks at midship P & S and draft marks up to full load line at FWD, mid ship and aft of P & S sides, spuds markings with 2 coats of white paint.	1	LS		
	j) Painting of all External/ Main Decks.				
	i) Remove all oil, grease and foreign material by chemical cleaning. (Including Cost of Chemical, supply by Yard)	500	SQM		
	ii) High Pressure F/W washing(100 bar)	500	SQM		
	iii) Copper Slag Blasting all areas to SA 2.5	500	SQM		
	v) Apply Epoxy Primer 50 mic. DFT	1000	SQM		
	vi) Apply two coats of surface tolerant epoxy green 125 mic. DFT each. (Total 250 Mic.)	1000	SQM		
	k) Painting of deck fittings including excavator, Deck Crane, Spud hoisting, Spud carriage areas Hyd Cylinders and anchor winch.				
	i) Remove Oil and grease by Chemical Washing (Including Cost of Chemical supply by Yard)	200	SQM		
	ii) High Pressure (150 b) F/W Washing	500	SQM		
	iii) Copper Slag blasting to SA 2.5	500	SQM		
	v) Mechanical cleaning & Chipping.	400	SQM		
	vi) Apply one coat of epoxy primer 50 mic. DFT.	1000	SQM		
	vii) Apply one coat of Chloro rubber primer/ Vinyl anti corrosive primer- 75 Mic. DFT	1000	SQM		
	viii) Apply one coat of acrylic finish 40 Mic. DFT of Buff Colour.	1000	SQM		
	NOTE: Allow plug of scuppers, Cover anodes, echo sounder, proper care to be taken for all these lines passes of PLC systems, Junction boxes etc in consultation with ship staff etc., grease while undertaking steel renewals / blasting and painting, etc.				
2	a) Sea Chest: a) Sea growth / Barnacle's if any in tunnel to be removed.	10	SQM		
	B) Mud/Muck any other foreign material deposited to be removed and cleaned.				
	C) Sea chests to be cleaned, chipped wire brushed and 2 coat underwater paint to be applied.				
	b) Filter Casing tank: Port & Stbd. sea suction filter tank casings to be hand scrapped, cleaned and painted. Filters to be removed & fitted back after cleaning & painted.	10	SQM		
	Opening and closing of filter casing	1	Nos		
	i) Copper Slag Blasting all areas to SA 2.5	20	SQM		
	c) Sea gratings:				
	- Port & Stbd sea gratings (ship supply).	2	NOS		
	d) Sea water filter(strainers):				
	- P & S main sea water PP filter	2	NOS		

Sl. No.	GROUP-B Description	Qty.	UoM	Unit cost	Total cost
	To be cleaned, Chipped, painted & fitted back gratings to be fitted with new SS bolt if required.				
3	E/R BILGES & Tank Tops & Store room & Pump room				
	a) Bailing out water, Oil, mud, muck and remove muck & sludge and to dispose off from bilges to shore dustbin.				
	i) Sludge/oily water etc.	4.00	TON		
	ii) Mud & muck etc.	2	TON		
	b) Scrap, chip, wire brush and cleaning bilges with cotton rags & chemical and applying one coat of epoxy primer at 50 MIC DFT. Final coat should be white paint (Chemical & Rags yard supply)	200	SQM		
	c) Floor plates/ chequered plates removal and refitting back (50% extra on above (b))	300	SQ.M		
4	F.W. TANKS/ BALLAST TANKS/ DIRTY OIL TANK/ F.O.TANK/ VOID SPACES ETC.: (Total - 13 tanks)				
	All jobs as required are to be carried out by the Shipyard.				
	a) Gas free inspection of the tank by Govt. Inspector and providing Gas free certificate for man entry in triplicate.	8	NOS		
	i) Oil/sludge/oily water etc.	2	TONS		
	ii) Mud/muck debris etc.	2	TONS		
	iii) Loose cement, debris, etc.	2	TONS		
	c) Hard scrapping, wire brushing, spot chipping and cleaning/mopping the tank for surveyor's inspection (including disposal off debris generated etc.) preparing chemical cleaning & mopping the oil/sump tanks.	50	M- Sq		
	i) F/W Tank/ void spaces- 2 nos.	42.5	CUM		
	ii) F.O.Tanks,hyd oil t/k,bilge t/k & L.O.tanks-9 Nos.	165	CUM		
	iii) Ballast tanks - 2 nos.	315	CUM		
	Scraping	500	SQ.M		
	Chipping	500	SQ.M		
	Wire brushing	500	SQ.M		
	Chemical cleaning	500	SQ.M		
	Power brushing, Per SqM	500	SQ.M		
	LP Washing after first coat painting	500	SQ.M		
	Mopping with cotton waste	500	SQ.M		
	Painting- 1 coat	500	SQ.M		
	d) i) Chemical cleaning of the fuel tank after completion of inspection and pressure test etc. Drain plug to be put back in place for reuse.	738	SQ.M		
	ii) Removing & refitting plugs	2	NOS		
	iii) Mopping	600	SQM		
	e) Opening and closing of manhole door of tanks with new joint & bots.	12	NOS		
	g) F/W tanks to be painted with pure epoxy solvent free good grade paint.	43	CUM cap of Tank		

GROUP-B					
Sl. No.	Description	Qty.	UoM	Unit cost	Total cost
	LP Washing after first coat painting	258	SQ.M		
	Mopping with cotton waste	258	SQ.M		
	Painting- 2 coat	516	SQ.M		
	h) Tanks to be cleaned & presented for IRS survey- 11 Nos ## Refer Group B SL No:4				
5	Removal & renewal of shipside aluminum anodes at: Total				
	a) H.T. & L.T. coolers = 4 nos (size=465x60x40m) ## anode ship supply	4	Nos		
	b) other areas				
	i) Under neath Escavator (Aft. side) ## anode ship supply	5	NOS		
	ii) STBD side spud (8 mtrs) tilting area ## anode ship supply	4	NOS		
	iii) Portside spud (8 mtrs) tilting area ## anode ship supply	4	NOS		
	iv) FWD Spud carrier side 8mtrs tilting area ## anode ship supply	7	NOS		
	v) Around the ship (U/W) ## anode ship supply	22	NOS		
	Sizes = I to V i) 465 x 60 x 40mm ii) 520 x 60 x 40mm Then total 46 nos approx ## anode ship supply	46	NOS		
	<u>NOTE: 1) All above tank cleaning is inclusive of cost of Pressure testing. No separate cost will be paid against Pressure test of tanks. 2) Greasing of Anodes, staging and any other facility used for the above works will not be paid extra and are deemed to be included in the cost of painting and in above quotes.</u>				
6	Cost of Paints. (Estimate) (Vouchers are required to produce for actual Quantity of paint consumption, for settlement of Yard's Invoice). ## Budgetary cost indicated for the total cost of paint for the current package. Will be charged at actuals + 10% Yard markup. ## Guarantee for Paint shall be on back to back basis. ie guarantee offered by paint supplier shall be passed on to DCI.	1			
	Note: 1) Greasing of anodes, staging, any other facility, preparatory works carried out/ used for painting will not be paid extra and are deemed to be included in the cost of painting.				
	2) All openings to be covered with polythene sheets, canvas covers in Engine Room, Pump Room to ensure all the systems are well protected from grit/ copper/ zinc prior blasting				
	3) Colour of all the coats shall be contrasting to enable differentiation between one coat and another				
	4) Paints - Yard supply on behalf of DCI				

GROUP-B					
Sl. No.	Description	Qty.	UoM	Unit cost	Total cost
	5) Yard shall rig up staging initially itself to in accessable areas for taking up UTG, Blasting, One coat of primer, so that, steel renewals shall be undertaken independently. Cost of Stagging shall include in above quotes and no seperate cost will be entertained.				
	6) All Blasting works under water areas and hull exterior are to be ensured for completion initially itself, so that the same activity shall not interfere with the other repairs.				
	TOTAL FOR GROUP – B:				

GROUP – C					
Sl. No.	Description	Qty.	UoM	Unit cost	Total cost
STEEL RENEWALS					
STEEL PLATE RENEWAL :					
	Steel plates renewal includes associated beams, angles, stiffeners, etc., which are wasted as per UTG report and as marked by Ship staff, Surveyor. The rate must be inclusive of staging with one coat of primer. All plates must confirm to Lloyds' Grade "A" Steel. (consider Specific Weight of steel 7.85 gms / cub.CM).				
1	Shell plate above water level	3	TONS		
2	Shell plate below water level	4	TONS		
3	Main deck & other weather decks	1	TONS		
4	Tank internals & confined places.	0.5	TONS		
5	a) Welding doublers (80%)	0.5	TONS		
	b) Off fair and refit (0.75%)	0.5	TONS		
	c) Fair in place (0.5%)	0.5	TONS		
6	Welding of worn-out Joints on hull, & jointing parts all 3 nos spuds, and the U/W pencil point. Wherever necessary as per ship staff instructions to be carried out, Minimum 3 runs.	32	MTRS		
7	UTG readings to be taken on the following structures and four copies to submit:	2500	POINT		
	i) Underwater Hull				
	ii) Spuds, Spud Carriage etc. completely				
8	Building up by M.S welding on the pitted spots of plates/ wasted welding areas and levelling by grinding. 1) for welding of Spots size- 25 X 25 mm-100 spot ## Qtd for per KG of electrode.	20	Kgs		
	2) for welding of Spots size- 50 X 50 mm-100 spot ## Qtd for per KG of electrode.	40	Kgs		
9	All Cracks of Back Actor support structure to be gauged and welded properly.	40	Kgs		
10	Air Vents housings, Hatch covers corroded to renew as required	500	Kgs		
11	Hydraulic valves compartment underneath (bck actor compartment) cracks to be attended by proper gouging & welding to be done with suitable electrodes	60	MTRS		
	NOTE: 1) All the above areas to be U.T.gauged, examined on docking of the vessel with in a week and freeze the scope of work in consultation with IRS, Ship staff, Attending supdt.				
	2). Yard to provide a detailed action plan along with Bar Chart with the quote plan of action for completing of works as per schedule .				
	3) Cost of Staging will not be paid extra and staging cost deemed to be included in the cost of Steel renewals and in all Groups A to H.				
TOTAL FOR GROUP – C:					

GROUP-D					
Sl. No.	Description	Qty.	UoM	Unit cost	Total Cost
	ENGINE ROOM MACHINERIES OVERHAULING				
1	HEAT EXCHANGERS OVERHAULING (Box Coolers/heat exchangers, working pressure = 03 bar)				
	The following tube type coolers and other Coolers are to be disconnected and removed from the Vessel to Workshop. The end covers of the each cooler are to be opened. Cooler to be chemically cleaned, chipped, and painted with apexior-3 and Pressure tested. Rate to be inclusive of cost of chemicals and paint. Quoted cost including cost of Pressure test and Cost of transportation to work shop as required.				
	a) For M/E, F.W. Cooling L.T. Testing Pressure = 05 bar (QSK50, LT) Sizes: L = 1465mm, B = 1250 mm No. of tubes = 08 nos	1.00	NOS		
	b) QSK 50 H.T. (F.W. Cooling) Sizes = 950mm, B = 850 mm No of tubes = 08 Nos	1	NOS		
	Hydraulic Cooling System				
	a) Small One L= 1100 mm, B = 1750 mm No of tubes = 20 Nos	1	Nos		
	b) Big One L= 1465 mm, B = 1500 mm No of tubes = 20 Nos	1	Nos		
	Plugging of tube (considering 6 nos)	6	Nos		
2	PUMPS OVERHAULING				
	Following pumps are to be de-coupled with primemover, remove from base plate after disconnection of pipes & accessories, transporting to workshops, over haul completely, assemble and fitted back in position satisfactory running trials to be shown to ship staff. Capacity of pumps ranging between 5HP to 10 HP. Necessary spares to be supplied by yard. Note: Quote must be including the cost of chipping and painting of foundation areas of Pump and Motor while fitting back.				
	Cooling Water Pump for Hydraulic Oil	2	NOS		
	Hydrophore Fresh Water Pump	1	NOS		
	Grease Pumps	4	NOS		
	Main AC circulating pump	1	NOS		
	Bilge pump	1	NOS		
	Condensor water transfer pump (A/C to Sewage)	1	NOS		
3	AIR COMPRESSOR				
	Complete Air compressor to be over hauled and satisfactory trials to be shown. Details: pressure motor:10 bar, air bilge pressure: 5101/ min compress motor, 4kw, rpm=2885. Necessary spares yard supply.	1	NOS		
4	BOW THRUSTER:				
	A) Details: Make HRP, Type: A2 FLM 1000 Proper dia = 1300mm, Speed = 1200 RPM Blade Material = NI/ALBROZE- 4 Bladed propeller. The following works are to be carried out for proper operations. To carry out all necessary repairs and system to be shown satisfactory trails.	1	NOS		
	a) Blade profile conditions to be checked and report to be submitted	1	NOS		

GROUP-D					
Sl. No.	Description	Qty.	UoM	Unit cost	Total Cost
	b) Locking nut to be checked and necessary repairs if required to be attended.	1	NOS		
	c) Shaft seals are to be renewed and ensure no leakage through seals. Proper clearance to be maintained by carrying out necessary repairs as required.	1	NOS		
	d) Bow motor to be examined for proper insulation & Report on defects (if any) to be submitted.	1	NOS		
	f) Tightness of palm bolts & nuts to be checked and tightened to required torque.	1	NOS		
	B) If required, Reconditioning of Propeller to be carried out by Yard to get proper profile- Budgetary quote to be submitted. . (Note: Actual cost + 10% over head shall be paid If reconditioning of blades done through OEM).	1	NOS		
	C) Propeller are to be removed, cleaned & buffed, inspected for any cracks by DP / MPI test and rectified including cone. Propeller and cone to be polished buffed and applied one coat of grease.	2	NOS		
5	One Thruster Kort Nozzle is missing from place. New Kort nozzle is available onboard, same to be renewed in consultation with OEM	1	NOS		
6	Complete Air conditioning system: to be over hauled and satisfactory trials to be shown.	1	NOS		
7	Ventilators: Ceiling Ventilators are to be completely over hauled and put into operations. Grills Vent ducts to be scraped and painted properly.	1	NOS		
	NOTE: All above elements shall be quoted considering assembling back with new spares / dismantled parts and to show satisfactory trials as applicable in each case above. Spares Cost at extra Cost.				
	TOTAL FOR GROUP-D				

GROUP- E					
Sl. No.	Description	Qty.	UoM	Unit cost	Total cost
	SPUDS, VALVES COOLERS AND PIPELINES				
1	VALVES, COOLERS AND PIPELINES:				
	Valves are to be removed from the place after removing pipes from the Valves and removing Mounting Nuts & bolts of the pipe using spanners. Valve to be taken out from the ship and over haul completely. . After repairs all Valves are to be chipped & painted before fitment.V/V to fit back with new rubber packings/ seats rings to be renewed of necessary and satisfactory trails to be given. Quoted Cost including Cost of pressure test, new Gaskets, Nuts and Bolts etc.,				
	GLOBE V/V/S DN80	14	NOS		
	NON RETURN GLOBE V/V/S DN80	13	NOS		
	NON RETURN GLOBE V/V/S DN50	2	Nos		
	GLOBE V/V/S DN50	3	NOS		
	STORM V/V DN50	2	NOS		
	GLOBE V/V DN40	2	NOS		
	GLOBE V/V 1 1/4 "	3	NOS		
	CHECK V/V 2"	1	NOS		
	GLOBE V/V 1 "	1	NOS		
	a) Cost for metal built up & level up with hand grinding. (Machining to required Dia at extra cost) if required.	20	KG		
2	OVERHAULING OF SEA SUCTION , Over Board VALVES				
	a) The following valves to be opened examined, overhauled and repaired as required (including operating mechanism) and pressure tested. Internal coatings to be restored. Quoted Cost including Cost of pressure test, new Gaskets, Nuts and Bolts.				
	OVERBOARD V/V				
	DN100	2	NOS		
	DN80	2	NOS		
	3-WAY DN100	1	NOS		
	3-WAY DN50	1	NOS		
	DN65	1	NOS		
3	STORM VALVE:				
	a) Storm valves are to be removed from the place. Valves are to be dismantled, overhauled, cleaned and Pressure tested and to be put up for IRS Surveyor's inspection. Qtd Cost including cost of transport to w/shop, PR test etc.' Quoted Cost including Cost of pressure test, new Gaskets, Nuts and Bolts.	2	NOS		
	b) Cost for metal built up & level up with hand grinding. If required Machining to be done required Dia	5	KG		
	c) Storm valves are to be repaired as recommended by surveyor, such				
	i) The valve seat to be skimmed	2	NOS		
	ii) The valve flap to be rubber lined	2	NOS		
	iii) The valve Spindle is to be manufactured and replace the old spindle	2	NOS		
4	HYDRAULIC PIPELINES:				

Sl. No.	GROUP- E Description	Qty.	UoM	Unit cost	Total cost
i)	BOOM PIPELINES				
	The following hydraulic (Boom pipelines) pipes of stainless steel to be dismantled from ship, transported to workshop, fabricated new, and pressure test shown to ship staff (all stainless steel pipes and fittings – Yard's supply). If required as per ship staff instructions				
	a) Sch.80 pipe - 60mm. O.D.	30	MTRS.		
	bends	10	Nos		
	Union	10	Nos		
	flanges	10	Nos		
	Ermeto couplings/ Tee/Compression Coupling	10	Nos		
	U clamp	10	Nos		
	Supports	10	Nos		
	b) Sch 80 pipe - 16mm. O.D.	30	MTRS.		
	bends	10	Nos		
	flanges	10	Nos		
	Union	10	Nos		
	Ermeto couplings/ Tee/Compression Coupling	10	Nos		
	U clamp	10	Nos		
	Supports	10	Nos		
ii)	BOOM, STICK PIPELINES				
	a)50mm	18	MTRS.		
	bends	10	Nos		
	Union	10	Nos		
	flanges	10	Nos		
	Ermeto couplings/ Tee/Compression Coupling	10	Nos		
	U clamp	10	Nos		
	Supports	10	Nos		
iii)	STICK PIPELINES- SEEM less Hyd Pipes				
	Corroded, damaged, Hyd. Pipelines to be renewed with Sch-80 pipes and as indicated below if required as per ship staff instructions				
	a)50mm	15	MTRS.		
	bends	10	Nos		
	Union	10	Nos		
	flanges	10	Nos		
	Ermeto couplings/ Tee/Compression Coupling	10	Nos		
	U clamp	10	Nos		
	Supports	10	Nos		
iv)	BUCKET PIPELINES- Seamless hyd lines				
	Corroded, damaged, Hyd. Pipelines to be renewed with Sch-80 pipes and as indicated below if required as per ship staff instructions				
	a)50mm	12	MTRS.		
	bends				
	Union				
	flanges				
	Ermeto couplings/ Tee/Compression Coupling				
	U clamp				
	Supports				
5	SANITARY LINES				
	Various places S.W. / (Seamless steel sch-40) F.W. lines corroded to wasted same to be identified & replace with new pipe (including labour cost of pipes and all consumables)				
	a) ND Upto 15mm	20	MTRS.		
	Bends				
	flanges				
	Uclamp				
	supports				
	b) ND 16mm to 25mm	20	MTRS.		

GROUP- E					
Sl. No.	Description	Qty.	UoM	Unit cost	Total cost
	Bends				
	flanges				
	Uclamp				
	supports				
	c) ND 26mm to 50mm	20	MTRS.		
	Bends				
	flanges				
	Uclamp				
	supports				
	d) ND 51mm to 80mm	20	MTRS.		
	Bends				
	flanges				
	Uclamp				
	supports				
6	SPUDS REPAIRS				
	spud details:				
	Pulling force: 25 tonnes Brake holding force = 25 tonnes in two directions weight of spud 64 tonnes , size of spud: 1.0 X 1.0 mtrs, Length of Spud: 32 mtrs. The following repairs are to be carried out on 3 Spuds	1	Spuds		
	a) Complete overhauling of Spud resting rollers-16 nos, guides, and its supporters etc.				
	Dismantle from position, Removal from Dredger, transport for repairs and refitting of spud of complete repairs	1	Spuds		
	b) Spud carriage wheels, Bushes, Pins built-up / hard faced, if required	60	KGS		
	c) Calibration of readings of carriage rails (top & bottom) to be taken and report to be submitted in triplicate				
	d) All greasing lines and nipples to be checked, cleared and flow to be shown.	30	NOS		
	e) Spud moving block to be checked and overhauled.	1	NOS		
	f) Spud moving wheel to be checked and overhauled.	1	NOS		
	g) Pin-Spud Carrier moving wheel to be checked and overhauled.	1	NOS		
	h) Pin: Essentric moving wheel to be checked and overhauled.	1	NOS		
	i) All Nut & Bolts to be checked and tightened loose bolts & nuts. Apx	48	NOS		
	After completion of repairs, satisfactory files to be showin to ship staff				
7	DECK CRANE				
	Details of Crane:				
	Capacity: S.W.L = 20 tons at 9 mtrs=9 tons at 15mtrs Max out reach = 15 mtrs, Mix out reach = 1.6 mtrs. Following to be checked if required repairs to be attended for full operation of Crane :				
	b) All greasing points to be checked and cleared and flow to be shown.	6	NOS		
	c) Wire rope to be renewed ## Wire rope ship supply	1	NOS		

GROUP- E					
Sl. No.	Description	Qty.	UoM	Unit cost	Total cost
	d) Slew Joy stick mal functioning, same to be procured by Yard and renewed for proper operations.	1	NOS		
	After completion of repairs, satisfactory trials to be shown to ship staff				
8	Backactor foundation bolts to be inspected and same to be tightened to required Torque. Defects if any to be attended and rectify as per procedure idnicated in the manual. (approx 48 studs)	48	NOS		
	<u>NOTE:</u> All above elements shall be quoted considering assembling back with new spares / dismantled parts and to show satisfactory trials as applicable in each case above.				
	TOTAL FOR GROUP-E:				

GROUP-F					
Sl. No.	Description	Qty.	UoM	unit rate	Total Rate
1	DREDGING EQUIPMENT AND SYSTEMS				
	a) Escavator slewing system: Defects on slewing system of Escavator to be identified and those identified defects are to be rectified for proper operations.				
	Slew motors: Make: Rexroth SI.No.'s : 32130812 to 13 Type: AZFM35560 Qty: 3 Nos KW or Hp	1	NOS		
	Slew Gear Make: SIERENIAAR, SI.No's: 58881 to 83 Type: CLP220 (slewing gas)	1	NOS		
	Brake details: Type:Hydraulic disk brake Brake: 4077BHN/63-01 Parking brake Pressure: 18 bar; Works as below	1	Nos		
	a) Intactness, wear & tear of brakes to be checked	1			
	b) Slewing bearing greasing lines & points to be checked, cleared and free flow to be shown	12			
	c) Open gear greasing lines & points to be checked, cleared and free flow to be shown	12			
	d) Slewing drives clearances to be set as per OEM/ship staff instructions	3			
	e) The M48 Bolts of special steel which connect the slewing ring to the flexible foundation, count 72 pieces, these bolts are torqued (with 8005 N/M) as per OEM/ ship staff instructions	48			
2	PEDESTAL AREA				
	pedestal wire rope to be checked if found any wear & tear same to be renewed.	1	NOS		
	After completion of above repairs satisfactory trails of the system shown to ship staff				
3	WINCHES & WINDLASS are to be overhauled for proper operations				
i	Spud Winch: (details)				
	Capacity: 65 tonnes Drum dia: 4.43mtrs Drum Pitch:0.17 inch Max. pull haul = 51.5 tonees Speed = 16m/ min Max. Hold force on brade = 103 tonnes	1	NOS		
	System to be checked in functioning areas				
	a) Brake line to be checked. Spares yard supply	1	NOS		
	b) Clutch in / Clutch out studpaly to be checked	2	NOS		
	c) Breather caps to be changed	2	NOS		
	d) P.S. Spud Hyd. Motor & gears seals to be checked Spares yard supply.	1	NOS		
	e) Rusted bolts & nuts to be changed on Hyd.Motor				
	f) All 3 Nos spud tilting cylinder breaking bushes to be changed	3	NOS		
ii	Anchor Winch:				
	Details : Max. pull house = 12 tonnes at 10m / ,w chain length = 110 mtr chain stopper : 44mm studlime chain Winch type: Stopper				
	a) Breakshoe to be checked, spares yard supply	1	Nos		

GROUP-F					
Sl. No.	Description	Qty.	UoM	unit rate	Total Rate
	b) chain stopper to be checked and any repairs if any to be attended.				
	c) Anchor chain chipping & painting to be done Paint ship supply	1	NOS		
iii	Mooring Winch:				
	Details: Mooring Winch Max. Pull hull = 6 tonnes Max. Hold force on bracious = 12 tonnes Drum Capacity: 180 mtrs				
	a) Electrical panel to be checked	1	nos		
	b) Breather cap to be change	1	Nos		
	c) Rusted Bolts & Nuts to be changed	1	Nos		
	d) Wire rope to be changed Wire rope ship supply	1	nos		
	After defects rectification if any satisfactory trails of equipment shown to ship staff.	1	nos		
4	Overhaul AUTOMATIC GREASING SYSTEMS for proper operations				
	Details: Grease pipeline DN:2445/2, seamless steel tube for dynamic loads Max. Working Pressure : 399 Bar Max. Operating pressure : 350 Bar				
	Grease Motor Details: Grease pump, Make: Lincoln, Vol:415, Amp: 1.3, RPM=1360 Hz=50, Phase:03				
	Following systems are to be over hauled for proper operations				
	a) Three Nos Electrical driven grease p/p to be overhaul Necessay spares yard supply.	3	NOS		
	b) Grease Supply upper carriage towards inside	3	NOS		
	c) Grease supply upper carriage	3	NOS		
	d) Grease supply monoblock	3	NOS		
	e) Grease supply to stick	3	NOS		
	f) Grease supply to bucket to be check and rectify	1	NOS		
	g) Automatic Grease pneumatic system - in grease room to checked and rectify	1	NOS		
	h) Spud Casing & spud carrier grease line to be checked and rectify	20	MTRS		
	i) New grease line to make for spud carrier	10	MTRS		
	j) All spud spud casing, spud carrier and bucket grease mounting for grease nipples to be check and replace with newones (these nipples are frequent consumbales). All Greese Lines/ nipples cleared and free flow to be shown	20	Nos		
	k) grease distribution boxes of grease lines to be overhauled (6 boxes)	6	No		
	After repairs if any on above system, satisfactory trails to be shown to the ship staff				
5	Spud, Spud casing and Winch Room Sheaves (Tumbler blocks) to be over hauled				
	Sheave dimensions: Sheave diameter = 1600mm Sheave Thickness (groove) = 100mm Centre Pin Dia = 600mm Pin dia meter = 220mm				

GROUP-F					
Sl. No.	Description	Qty.	UoM	unit rate	Total Rate
	a)Total Nos of Port Spud Sheaves to over haul. Necessary spares yard supply.	9	Nos		
	b)Total Nos of STBD side sheave to over haul.. Necessary spares yard supply.	9	Nos		
	c)Total Nos of Port Winch room sheaves to over haul. Necessary spares yard supply.	4	Nos		
	d)Total Nos of STBD Side sheaves to over haul. Necessary spares yard supply.	4	Nos		
	e) Spud carrier sheave details Sheave diameter = 600mm Sheave tcrists (Q) =60mm Pin dia = 170mm	4	Nos		
	f) Total Nos of sheaves to over haul. Necessary spares yard supply.	4	Nos		
6	Main Hydraulic Pumps 1 and 2 Repairs: make-HAWE Hydrauliks	2	Nos		
	Main Hydraulic pumps 1 and 2 are not developing normal operating pressure (35 BAR). Need to study the defect including control Valve and essential repairs are to be done and made both pumps fully operational for proper operations. If required OEM services for Hydraulics and PLC may be engaged, for which OEM Cost plus 10% shall be paid by DCI.				
	TOTAL FOR GROUP-F:				

GROUP-G					
ELECTRICAL EQUIPMENT					
Sl. No.	Description	Qty.	UoM		
1	OVERHAULING OF ELECTRICAL MOTORS AND MISCELLANEOUS				
	the following Motors are to be overhauled. A.C. Motors to be removed from place, overhauled by renewing bearing (ship supply) if necessary. Insulation to be improved & fitted back by aligning and satisfactory trials to be given. Motor				
	a) Bilge pump motor, 12.5 kw	1	Nos		
	b) S.W. Hydrophore P/P motor 2.6kw	1	Nos		
	c) Bilge oil water separator pump motor, 0.55kw	1	Nos		
	d) Coolant P/P Motor, 4.6kw	2	nos		
	e) Hydraulic P/P motor, 7.5 kw	1	Nos		
	f) Grease P/P Motor, 0.18 kw	2	Nos		
	g) Sewage treatment plant motor, 1.1 kw	1	Nos		
	TOTAL GROUP-G				

GROUP – H COST PLUS JOBS								
Sl. No.	Description	Qty.	UoM					
1	1) The items which are not covered in any of the above work scope / description but are to be carryout on "cost plus" basis for which payment will be made as under, subject to the condition that the overall cost claimed is considered reasonable by the Corporation. The Corporation reserves the right to inspect tenders, records to satisfy itself about the reasonableness of the claim:							
	a) Cost of labour inclusive of all overheads etc., directly employed on the work as reflected in the Work Done Certificate.							
	i) Skilled labour per man-day of 8 Hrs. (normal time) shift.	50	Days					
	ii) Unskilled labour per man-day of 8 Hrs. (normal time) shift.	50	Days					
	b) Materials procurements for repairs							
	c) Paints Cost and other Cost of material incorporated in the work as reflected in the Work Done Certificate (in case of material purchase of above Rs. 10,000/- value made, supporting vouchers/ bills should be enclosed).							
	d) Extra 10% on actual material cost only will be paid towards Over head, Handling/ Transportation and other incidental charges etc. in respect of OEM/ Expert services.							
	Misc Works							
	Excavator Boom STBD Ram Seal Renewal (Cylinder bottom seal)							
2	2) Excavator boom STBD side cylinder to be removed from place by removing 2 Nos pins and transport to work shop. Renew boom cylinder seals, renew ram piston seals. Boxed back with hydraulic oil and then pressure test to be carried out at 450 bar under ship staff supervision. Then fit back in position and connect all pipes and give satisfactory trials. Hydraulic oil and required seals will be supplied by ship staff. Some work details are given below: SPARES YARD SUPPLY	1.00	Nos					
	Removal & refitting of hydraulic pipe lines and ascertain any leakages							
	Draining of hydraulic oil from the pipe line /ram							
	Removal of pins from the clamps							
	Removal & transportation of ram from ship to workshop							
	Overhauling of ram							
	Renewal of all seals							
	Transportation to ship							
	Crane for holding the ram for the insertion of the pin							
	Filling oil to the system							
	Inspection for leaks if any to be rectified							
	Trails & commissioning							
	Procurement of fastening, greases, liquid nitrogen etc							
3	3) Ventilation Blowers Guard Fitting renewal Existing all ventilation blower guard fittings found rust and not in good condition in all the respective compartments ie engine room, winch room, workshop and pump room to be renewed by workshop.							
	Engine Room = 670 mm	1.00	NOS					
	Winch Room = 470 mm x 2 in Nos	2.00	NOS					
	Pump Room = 450 mm	1.00	NOS					
	Work Shop = 430 mm	1.00	NOS					
4	4) Renew of Quick Closing Valve Cable Existing quick closing valves of main engine day tank and hydraulic reservoir tank cable found rusted. Not operated annually on deck. Same cables to be supplied/renewed by workshop. After completion of job satisfactory trails shown to ship staff. Above job to be carried as per ship staff instructions. Details : Length of cable - 6 mtrs, Dia - 6 mm	1.00	Nos					
5	5) Renew of deck Crane Cylinder Pipe Line Deck Crane existing cylinder hydraulic pipe line found hole. Same to be renewed by the workshop. Above job to be carried out as per ship staff instructions. Note: Pipe Dimension 200 mm x 16 mm 1 No ERMETO coupling - 02 Nos	1.00	LS					
	6) CO2 Cabinet Hinges Renew							

GROUP – H COST PLUS JOBS									
Sl. No.	Description	Qty.	UoM						
6	Existing CO2 cabinet door hinges found rusted, door not operated properly. Same hinges to be renewed. And generator room CO2 cabinet servicing to be done. Above jobs to be carried as per ship staff instructions	4.00	Nos						
7	7) Renew of FWD Spud Winch Pump Bolts Forward spud winch hydraulic pump and block socket bolts found rusted and bolts head damaged. Same to be opened, threads formed, new allen bolt fitted back. Above job to be carried out as per ship staff instructions. Some work details are given below:	1.00	LS						
	Removal of flexible hoses from the pump-2 Nos								
	Draining of hydraulic oil from the pipe line								
	Removal & refitting of hydraulic motor								
	Builtup of bolt holes								
	Drilling&Tapping of bolt holes								
	Renewal of bolts								
	Renewal of packing								
	Leak test ,rectification &trails								
8	8) Hydraulic Oil Coolers cleaning Existing hydraulic oil coolers in engine room 3 in Nos end cover to be opened, inspected, require to be cleaned. After completion of cleaning pressure test to be done. Above job to be carried as per ship staff instructions Total coolers in engine room - 3 Nos Tube Types. Some work details are given below:	1.00	LS						
	Removal , transport & overhauling of coolers	3.00	Nos						
	Renewal of anode of 2.5 Kg each (Cost & supply by yard)	6.00	Nos						
	Cost of anode 2.5 kg each	6.00	Nos						
	Removal & refitting of pipes	40.00	Mtr						
	Removal & refitting of valves	8.00	Nos						
	Renewal of fasteneres/packing	1.00	LS						
	Painting of cooler	3.00	Nos						
	Renewal of foundation bolts	1.00	LS						
	Repairs,builtup & grinding of body/cover	1.00	LS						
	Opening of access for lifting the Keel coolers-3 location	1.00	LS						
9	9) Recondition of Bucket Cylinder Ram One hydraulic bucket cylinder ram to be reconditioned by chrome plating. Complete Hyd Cyl to overhaul by carrying out Chrome plating on ram as necessary. Mirror finish achieve by grinding, after completion of all repairs, no leaks to ensure and Satisfactory trails to be shown to ship staff.	1.00	LS						
	Removal & refitting of hydraulic pipe lines and ascertain any leakages								
	Draining of hydraulic oil from the pipe line /ram								
	Removal of pins from the clamps								
	Removal & transportation of ram from ship to workshop								
	Overhauling of ram								
	Renewal of seals								
	Chrome lining								
	Transportation to ship								
	Crane for holding the ram for the insertion of the pin								
	Filling oil to the system								
Inspection for leaks if any to be rectified									
Trails & commissioning									
Procurement of fastening, greases,liquid nitogen etc									
10	10) Excavator Upper Carriage Hyd. Hoses Saddle Clamps Existing upper carriage main hydraulic hoses saddle clamps which was fitted, same to be opened, renewed with new one. Above job to be carried out as per ship staff instructions. Clamps supply by Yard. Some work details are given below:	1.00	LS						
	Fabrication of flat bar-2 Nos(125*14 mm FB-2.25 mtr-2 Nos)-61.82 @ 178	1.00	LS						
	Drilling of holes	20.00	Nos						

GROUP – H COST PLUS JOBS									
Sl. No.	Description	Qty.	UoM						
	Crane for holding the pipe for proper positioning of flexible hoses-7 noses	1.00	LS						
	Inserting ship supplied clamps in b/w the flat bar	1.00	LS						
	Procurement of fasteners	1.00	LS						
11	11) Renew of Bucket Cylinder Hyd. Flexible Hoses								
	Existing bucket cylinder hydraulic flexible hoses 3 in Nos found corroded near the flanges. Same to be renewed by yard. Jobs to be carried out as per ship staff instructions	1.00	LS						
	Renewal of flexible hoses								
	Collect & Transportation of flexible hoses from store								
	Cranage for removal & renewal of hoses								
	Oil draining from the hoses								
	Leak checking & commissioning								
	TOTAL:								

	ANNEXURE TO SCHEDULE-IV			
	SUMMARY FOR DRYDOCK REPAIRS			
	VESSEL'S NAME : DCI DREDGER BACKHOE-I			
	DRYDOCK PERIOD:			
	FINANCIAL IMPLICATION FOR DD REPAIRS OF DR-BH-1			
	<u>GROUP-WISE SUMMARY</u>			
	DESCRIPTION	GROUP		AMOUNT in
	Drydock hire & Service Charges	Gr-A		
	Surface preparation, Cleaning & Painting	Gr-B		
	Steel Plate Renewals	Gr-C		
	Engine Room Machineries overhauling	Gr-D		
	Spuds, Valves and Pipelines.	Gr-E		
	Dredging Equipment and Systems	Gr-F		
	Electrical equipments overhauling.	Gr-G		
	Cost Plus Jobs, Misc Jobs- excluding materials	Gr-H		
	IRS			
	OEM			
	Local procurement			
	Paints			
	Agency			
	Total	TOTAL		