



**COCHIN SHIPYARD LIMITED**  
COCHIN – 682 015

**TENDER DOCUMENT**

**FOR**

**EXTENSION OF QUAY 3 - CONSTRUCTION OF QUAY WALL,  
CRANE TRACK AND ALLIED WORKS**

**TENDER NO. CIV/112/2009/AGM (Civil)**

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**COCHIN SHIPYARD LIMITED**  
(A Government of India Enterprise)  
P.O. BAG NO.1653 COCHIN-682 015 INDIA

Tel. No. +91(484) 2361181/2351181/2366340  
Fax No. +91(484) 2370897/373902  
E- Mail: dgmcivil@cochinshipyard.com  
Web: www.cochinshipyard.com

File No: CIV / 112 / 2009/ AGM (CE)

27.05.2010

**TENDER NOTICE**

Sealed competitive tenders in the prescribed form are invited on behalf of Cochin Shipyard Limited from experienced contractors for the under mentioned work, so as to reach the undersigned on or before the date and time mentioned below:

Name of work : Extension of Quay 3 - Construction of Quay wall,  
crane track and allied works  
Earnest money to be deposited : Rs.50,00,000/- (Rupees Fifty Lakhs only)  
Cost of tender form : Rs. 2500/- + S.T (4%)

*(Those who download the tender form from website also will be required to remit the cost along with the tender documents in the form of DD.)*

Pre- Bid Meeting : 21-06-2010 at 14.00 hrs.  
Last date and time of issue of tender forms : 14-07-2010 upto 15.00 hrs.  
Last date and time of receipt of tender : 15-07-2010 upto 14.00 hrs.  
Date and time of opening of tender : 15-07-2010, 14.30 hrs.

(Technical bid only)

Date and time of opening of price bid : Will be intimated later to the bidders qualified in the technical bid.

Time of completion of work : 18 months

Short description of work :

The work involves earth work excavation of about 25700 cu.m, installation of Steel Sheet pile of Z section 24 meter long (about 670 T), installation of tie rods of 50mm dia (about 100 sets) 55mm (about 24 sets) and 70 mm dia (about 12 sets), installation of waling channels of about 9 T, RCC work of about 3900 cu.m which includes anchor wall, coping beam, crane beams, service and cable trenches, drains etc, Torsteel reinforcement of about 620 T, Soling

stone filling of about 4200 cu.m, Banking with river sand / M- sand of about 10000 cu.m, installation of Steel Bollards of capacity 100 T (3 Nos), 50 T (11 Nos) and 10 T (10 Nos), installation of rubber fender 600H X 2500L (34 Nos), 600H X 2000L(17 Nos), bituminous pavement works(2000 sq.m), driving bored cast-in-situ concrete DMC pile of length varying from 40 to 45 meter with diameter 500 mm (100 Nos) and 650 mm dia (170 Nos), conducting load test on pile & in-situ SPT for N value, installation of CR 100 rails about 540 m, laying pre-cast concrete blocks about 4000 m<sup>2</sup> etc.

The tenders should be submitted in two separate sealed covers superscribed as cover A “TECHNICAL BID” and cover B “PRICE BID” indicating name of work, tender No., due date, name, address and contact No. of the tenderer.

TECHNICAL BID should contain the documents listed in clause 5.1 of special conditions of contract: -

1. Remittance of EMD in a separate sealed cover kept outside the cover containing Technical bid.
2. Proforma of checklist duly filled and signed.
3. All Certificates as per Clause No.5.1 (b) in special condition.
4. The rates and amount of taxes and duties considered in the quoted price.
5. Proforma at Annexures I to XI duly filled and signed along with necessary documental evidence

PRICE BID: Price bid of those tenderers who qualify technically will only be considered. Price bid shall be with out any conditions and strictly in accordance with the tender schedule and specification. **Rates quoted should be inclusive of all taxes and duties.** Date of opening of Price bid will be intimated to successful tenderers in advance. PRICE BID WITH ANY CLAUSE LIKE DISCOUNT, REBATE, REIMBURSEMENT OF TAXES ETC OR ANY OTHER CONDITIONS ADDED BY THE TENDERER OTHER THAN RATES AND AMOUNTS WILL BE SUMMARILY REJECTED

The tender documents can be obtained from the office of the undersigned during office hours till the last date and time of issue of Tenders. All the tender documents (NIT, General conditions of contract, special conditions, specification, tender schedule and proforma of check list) are available on Cochin Shipyard’s website [www.cochinshipyard.com](http://www.cochinshipyard.com) and Govt. website <http://tenders.gov.in/departement.asp>. Tenderers can download the forms and use the same for submission of the tenders.

Assistant General Manager (Civil)

## CHECK LIST

No: CIV/112/2009/AGM (CE)

### EXTENSION OF QUAY III – CONSTRUCTION OF QUAY WALL, CRANE TRACK AND ALLIED WORKS

- |   |  |          |
|---|--|----------|
| 1 | Whether the tenderer has completed during the last seven years, works of similar nature described in the NIT costing either one work of value 30 Crores or two works of value 20 Crores each or three works of value 15 Crores each. | Yes / No |
| 2 | Whether the tenderer has an average annual turn over more than 12 Crores during the preceding 3 years.   | Yes / No |
| 3 | Whether the tenderer has furnished list of technically qualified personnel in their employment to be deployed for this work if awarded.  | Yes / No |
| 4 | Whether the tenderer is capable of mobilizing equipments/machinery for the execution of the work.  | Yes / No |
| 5 | Whether the tenderer has been blacklisted from any Govt. Dept./ Company.   | Yes / No |

Documental evidences in proof of 1 to 4 are to be furnished along with the Performa at annexure I to XI duly filled and signed.

Explanatory notes: Similar work(s) means Construction of structures such as Quay walls, jetty, berth, Ports, Harbours and bridge in the water body(s) such as sea, back waters and rivers which involves steel sheet piling works, installation of bored cast-in-situ concrete pile with diameter 50cm and above and providing RCC decking etc.

Assistant General Manager (Civil)

Signature, Name &

Address of Contractor:

Date:

## SPECIAL CONDITIONS

No: CIV/112/2009/AGM (CE)

### EXTENSION OF QUAY III – CONSTRUCTION OF QUAY WALL, CRANE TRACK AND ALLIED WORKS

1. The conditions enumerated below are in addition to and will have precedence over “the General conditions of contract given in “Conditions of contract and instructions to Tenderers of CSL”.
2. “General Conditions of Contract (GCC) and Instructions to Tenderers ” is available in the CSL website. The tenderer shall submit his tender document including GCC. Although, it is permissible to submit the tender without the copy of GCC, while entering into agreement by the successful tenderer, the GCC shall be duly signed by both the parties and form part of the agreement. As such, it is deemed that the tenderer has made reference to the GCC in the website or otherwise, and has full knowledge of its contents, although it is not signed and attached with the tender.
3. In the General Conditions of Contract DGM (Civil) should be read as AGM (Civil) who will be the Engineer- in- charge.
4. All corrigenda, addenda, amendments and clarifications to Tender Specifications will be hosted in the website [www.cochinshipyard.com](http://www.cochinshipyard.com) and not in the newspaper. Bidders shall keep themselves updated with all such information till the last date and time of submission of tender.
5. The tender for the work will be based on two cover system (cover ‘A’ & cover ‘B’)

#### 5.1. Cover A: -

Technical bid - shall consist of two separate covers A1 & A2. Cover A1 shall contain EMD for Rs.50 Lakhs in the form of DD drawn in favour of Cochin Shipyard Limited and shall be kept outside of cover A. Cover A2 shall consist of the following

- (a) Proforma of checklist duly filled and signed.
- (b) Following Certificates signed by the contractor.

**“ I / WE COMPLY WITH ALL CONDITIONS OF TENDER BY CSL AND CONFIRM THAT RATES QUOTED IN THE PRICE BID ARE INCLUSIVE OF ALL TAXES AND DUTIES INCLUDING SERVICE TAX IF APPLICABLE. I / WE ALSO CONFIRM THAT COVER B (PRICE BID) DO NOT CONTAIN ANY CONDITIONS ”**

**“ I / 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 PC ACT IN CONNECTION WITH THE BID.”**

(c) Proforma at Annexures I to XI duly filled and signed along with necessary documental evidence

Attested documents by gazetted officer in proof of experience & financial capability to be submitted. In the case of experience from private sector, work completion certificate and relevant TDS certificate shall be enclosed. An audited balance sheet and profit & loss Account for the preceding 3 years has to be submitted in proof of financial turn over.

**Cover B:**

Financial /price bid - shall contain the rates and amount for each item of work. There shall not be any clause like discount, rebate, reimbursement of taxes etc, added by the tenderers in the price bid. Price bid with any clause and conditions other than rates and amount will be summarily rejected.

5.2 The cover A & cover B shall be then put together in another cover marked Cover C. All the covers shall be sealed and superscribed with name of work, due date, name and address & Contact No: of contractor.

5.3 Cover C shall be opened at 14:30 hrs on 15/07 /2010 at the office of AGM (Civil). At first, cover A 1 containing EMD and cover A 2 containing technical bid shall be opened. In case the earnest money is not deposited or is not in order, the tender shall be returned to the tenderer unopened either on the spot, if the tenderer is present, or later by post. Only a mention to this effect shall be made in the tender opening register.

5.4 **SELECTION CRITERIA**

Selection criteria for qualifying the tenderers for opening the price bids in Cover ‘B’ of the tender will be as below:

**(i) Experience:**

The tenderer should have successfully completed at least one similar work of value not less than **Rs.30 crores** OR Two similar works, each of value not less than **Rs. 20 crores** OR Three similar works, each of value not less than **Rs. 15 crores**, during the

preceding seven years ending 31st March 2010. The tenderer shall furnish experiences as per the proforma at Annexure-II along with necessary documental evidences.

Explanatory notes: Similar work(s) means Construction of structures such as Quay walls, jetty, berth, Ports, Harbours and bridge in the water body(s) such as sea, backwaters and rivers which involves steel sheet piling works, installation of bored cast-in-situ concrete pile with diameter 50cm and above and providing RCC decking etc.

**ii) Financial Turnover:**

Average Annual Financial Turnover of the tenderer during the last three financial years ending 31st March 2010 shall not be less than **Rs. 12 crores**. An audited balance sheet and profit & loss Account for the preceding 3 years has to be submitted in proof of financial turn over.

**iii) Financial capability for executing the work:**

The tenderer shall furnish financial capability certificate for an amount not less than Rs 12 Crores (Average annual turn over) as per the proforma at Annexure-III along with the tender document, from his bankers/ financial institutions, to the effect that the tenderer is financially sound and has sufficient resources for executing the work as per schedule.

**iv) Personnel capability and equipments/machinery for executing the work:**

The tenderer shall furnish details of technically qualified personnel in their employment TO BE DEPLOYED FOR THE ABOVE WORK, if awarded, as per the proforma at Annexure-IV & V. The tenderer shall also furnish the details of equipments/machinery to be deployed for the above work, if awarded, as per the proforma at Annexure VI.

- 5.5 Price bid (cover B) of those tenderers who have qualified technically and submitted EMD and the undertaking that Cover B does not contain any conditions shall only be opened on a later date after giving notice to the qualified bidders. **Tenderer should ensure that his quoted amount as per cover B is not mentioned anywhere in other documents, directly or indirectly. If any such mention is made the tender will become invalid and shall become liable for rejection.**
6. Late tenders and tenders with conditions will be summarily rejected.
7. The acceptance of a tender will rest with AGM (Civil) who does not bind himself to accept the lowest tender and reserves to himself the authority to reject any or all of the tenders received without assigning any reason.

8. During the evaluation of tender AGM (Civil) may at his discretion ask the bidders for clarifications. Request for clarification will be given in writing and no change in prices or substance of the bid shall be sought, offered or permitted. No post-bid clarification on the initiative of the bidder will be entertained.
9. **The tenderer should keep open the validity of the tender normally for 90 days from the date fixed for its opening. However, it is also obligatory for the tenderer to keep the validity open for another 60 days for which request in writing/Fax will be sent by AGM (civil), before the expiry of the original validity.** The receipt of the intimation form the AGM (civil) should be acknowledged. Should any tenderer withdraw his tender before these periods, or make any modifications in the terms and conditions of the tender, which are not acceptable to CSL, the earnest money deposited by the tenderers shall be forfeited.
10. If any difference is found in different parts of the tender documents, the following will be the order of precedence.
  - (i) Schedule
  - (ii) Specification
  - (iii) Special conditions
  - (iv) Condition of contract and instructions to tenderers.
11. **Rates quoted should be in Indian Rupees inclusive of all taxes and duties, including service tax if any, in accordance with the tender schedule.**
12. The rates quoted by the contractor shall be for finished items of works including supplying appropriate materials, labour, equipment/tools, conveyance etc. all complete, unless specified in the tender schedule.
13. The tenderers are expected to have inspected the site, before quoting, read the conditions thoroughly and understand the works in all respect. Clarifications, if any may be obtained from the Assistant General Manager (Civil) before the tender is submitted, and if clarifications/details are not obtained before the tender is submitted, no claim on this account will be admitted.
14. A pre bid meeting is scheduled on 21.06.2010 at 14:00 Hrs. For any Clarifications, the same will be obtained from the Asst: General Manager (Civil) during the pre bid meeting. Specific points that require clarification should be submitted to AGM (Civil) on or before 16:30 Hrs on 20.06.2010.
15. 10% of the bill amount (less EMD) will be deducted as security deposit from running account bills and the same shall be released after the successful completion of the observation period of 12 months from the completion date of the project. Alternatively

the contractor can also deposit Security Deposit as Bank Guarantee for an amount equal to the 10% of contract value less EMD, valid upto 12 months after the scheduled date of completion of the work, from a nationalized Bank or Scheduled bank in India as per the performa at Annexure VIII. Then the Security Deposit will not be deducted from the running account bill. The contractor has to make good all defects during the observation period at his own cost.

16. The time of completion of work of 18 months shall be reckoned from the 15<sup>th</sup> day of the date of issue of the work order or the date of handing over the site whichever is later.
17. The contractor or his authorized Qualified Engineers (listed in Annex IV & V) with sufficient experience shall be available at CSL throughout the period of contract for receiving instructions from department, arranging and executing the work.
18. The Contractor may have to work round the clock including holidays, if required to complete the work in time without any extra cost. However work execution beyond office hours and on holidays shall be informed to the Engineer-in-charge well in advance and his clearance obtained.
19. The normal working time of the CSL is from 8.15 A.M. to 5.00 P.M on all weekdays and Saturdays with half an hour interval from 12.15 noon to 12.45 P.M. All Sundays, second Saturdays and fourth Saturdays are holidays. If the Contractor wishes to carry out the work beyond normal working hours and or on holidays, he should get specific approval from the Engineer-in-Charge for the same. Necessary supervision will be arranged by the department and the expenditure to be incurred in this connection will be borne by the department.
20. The completion of work may entail working in monsoon period/ rainy season also. The contractor shall take such an eventuality into consideration while quoting for the work. No extra rate will be admissible for work in monsoon/ rainy season. During monsoon and other period it shall be contractor's responsibility, to keep the construction site free from water at his own cost.
21. The successful tenderer will be required to execute an agreement at his expense on proper value Kerala State Stamp Paper in the prescribed departmental form.
22. In the event of the tenderer, after the issue of work order by CSL, failing / refusing to execute the agreement, the tenderer shall be deemed to have abandoned to the contract and such an act shall amount to and be construed as the contractors calculated and the willful breach of the contract, the cost and consequence of which shall be to the sole account of the tenderer and upon such an event CSL shall have full right to claim

damages therefore either together with or in addition to the forfeiture of Earnest Money Deposit.

23. The contract shall come into effect on the date of signature of both the parties on the contract (effective date) and shall remain valid until the completion of the obligation of the parties under the contract. The deliveries, supplies and performance of the service shall commence from the effective date of the contract.
24. All notices / written orders issued by CSL to the contractor under the terms of the contract shall be served by sending by Post or Fax or delivering the same to the contractors authorized site official nominated for this purpose.
25. All notices to be given to CSL under the terms of contract shall be served by sending by post or delivering the same to AGM (civil).
26. The Cochin Shipyard is an International Ship & Port Facility Security (ISPS) code compliant Shipyard and the contractor is obliged to comply with the provisions of the code in force and as amended from time to time. The site for the proposed work is a protected area and hence security rules and regulations including obtaining work permits, obtaining entry / exit passes including photo passes for men, vehicles and materials etc. for entering the area shall be observed by the contractor. Contractor/workers should produce police clearance certificate, passport or any other photo ID cards approved by CSL and medical fitness certificate, as per the performa at Annexure IX, issued by recognized medical practitioner (Allopathy) to get entry pass to Shipyard area.
27. All labour, skilled or unskilled shall be provided by the contractor. Settling any dispute with the labour/ subcontractor will be contractor's responsibility. The workers engaged for works should have sufficient knowledge and experience in the respective fields. This shall be proved to the Engineer-in-charge.
28. The drawings enclosed with the tender documents are to be returned along with the tender duly signed.
29. If the contractor abandons the contract or fails to commence the work in time or suspend the work for long duration (15 days), without valid reasons acceptable to CSL, CSL will terminate the contract and arrange the work at the risk and cost of the contractor. In such case EMD & Security Deposit will be forfeited forthwith.
30. The contractor shall bring all necessary machinery and equipments required for the work.
31. Contractor shall be permitted to use artificial manufactured washed and dust free crushed sand (fine aggregate) in place of "clean river sand", subject to approval of Engineer in Charge. Ready Mix Concrete shall be used to the maximum extent possible, instead of conventional concrete subject to approval of Engineer-in-charge.

32. The contractor is expected to acquaint himself with the site conditions, labour situation, wage and benefits applicable to labourers, working hours, out turn of work by labour and the fluctuations which are likely to happen till the work is completed on all the above aspects prior to quoting the rates. The submission of the tender by the tenderer implies that he has made himself aware of all the above situations and conditions. Any extra claim on this account will not be entertained. Statutory recoveries, if any, will be made from the payment due to the contractor.
33. The work shall be carried out without damaging any of the existing structures/ structures under construction in the locality.
34. The contractor shall submit a detailed time schedule in conformity with the completion time stipulated in the tender within 15 days from the date of issue of letter awarding the work.
35. Relevant I.S. codes are to be followed for all items of work, any deviation for the work are found with this tender documents, Indian Standard specifications and Kerala Public Works Department specifications are to be followed. If specifications are silent about any aspect, other codes as directed by the Engineer-in-charge will be followed. In the absence of any code dealing with particular aspect, sound engineering practice shall prevail. Decision of the Engineer-in-charge in this respect will be final. In case there is a difference between Indian standard code and KPWD specification, the former shall prevail.
36. All materials to be used on the work will have to be got approved by the Engineer-in-charge/Third party inspection agency before use. Unless otherwise decided by the Engineer-in-charge all the materials are to be procured by the contractor.
37. For the construction purpose, the entire site will be handed over. If this is not possible due to reasons, which cannot be anticipated now, the site will be handed over in parts. Proportionate extra time will be granted if found necessary by the Engineer in Charge and the decision of Engineer in Charge shall be final.
38. The contractor shall at his risk and cost make all arrangements and shall provide all facilities as the Engineer-in-charge may require for collection, preparing, forwarding and testing the required number of samples for test (or for analysis) to places as may be directed by the Engineer-in-charge. The charges for testing to be borne by the contractor.
39. Sampling and testing of the material supplied by the contractor for use on the work shall be done as per the provisions of the relevant BIS codes/specifications. In the absence of BIS specification in a particular case, the sampling and testing shall be done as directed by the Engineer in charge as sound engineering practice. Material conforming to the

specifications and approved by the Engineer in Charge/Third party inspection agency shall only be used by the contractor.

40. Contractor shall work in close co-ordination with other agencies working in the same work site at the same time. The space for storage of materials for each work should also be decided by mutual agreement among the contractors working in the same area. CSL will not entertain any claim regarding non-availability of space for storing materials nor can enter into any discussion to settle the dispute between contractors regarding usage of space for storing materials etc.
41. Regarding supply of electricity, the following points will be applicable in addition to Annexure 'A' (page 52) of general conditions of contract: -
- (a) Electricity charges for the energy consumed will be recovered monthly at the tariff applicable to construction purposes subject to revision by KSEB. Present tariff varies from Rs 5.25 to Rs 8.50 per unit. Fixed charges and welding load charges will be extra. Recoveries towards electricity charges will be made from the payment due to the contractor.
  - (b) Cochin Shipyard limited will make available power at one of the existing outlets within a maximum distance of 100m from the site of work. The contractor shall make his own arrangements for taking power from such outlets at his own cost and get it approved by U & M. Department well in advance of starting the work. Electric power supply from KSEB grid is available in CSL. There can be restriction in supply of power by KSEB. Contractors shall take note of this situation. CSL shall make every endeavour to make available uninterrupted power supply to the contractor. But if due to any reason power supply to CSL is restricted or stopped by KSEB or any other agencies CSL will also have to restrict or stop electric power supply to the contractor.
42. Water required for the work will be supplied by CSL at one point within 100m from the site of work at Rs. 55 (Rupees Fifty Five only) per thousand litres. However adequate supply of water cannot be guaranteed all the time and the contractor may have to make his own arrangements to get water through other sources in such cases. No extra claim will be entertained in this regard. Recoveries towards water charges will be made from the payment due to the contractor. Water arranged by the contractor shall be clean fresh water free from oils, acids, alkalies, salt, sugar, organic materials or other harmful materials. The water used shall comply with clause 5.4 of IS: 456-2000. Potable water is generally considered good for mixing concrete. Samples of water arranged by the contractor shall be taken by the Engineer-in-Charge and got tested in accordance with the

provisions of relevant BIS codes. In case test results indicate that the water arranged by the contractor does not conform to the relevant BIS codes, the same shall not be used for any works. The cost of tests shall be borne by the contractor.

43. For the following items of work, theoretical requirements of cement will be calculated at the rates given below: -

RCC M 25                      – 400Kg/m<sup>3</sup>

RCC M 30                      – 430Kg/m<sup>3</sup>

The minimum quantity of cement specified above shall be used, even if the quantity arrived by the mix design is less. For all other items, theoretical requirements of cement as per clause 57 of GCC or KPWD data will be followed. For design mix concrete, the contractor shall make calculations and jointly with Engineer-in-Charge carryout all necessary tests at contractor's cost to determine the proportion by weight of cement, aggregates (coarse and fine), admixture if required and water necessary to produce concrete of required grade having the desired workability and, water cement ratio (not exceeding the allowable limit) prior to commencement of work. For designed mix the contractor shall submit the following for the approval of Engineer-in-Charge.

- i) The proportion of cement, coarse aggregate, fine aggregate and water so determined.
- ii) The sieve analysis of aggregates, which he proposes to use in the works.
- iii) Full details of the tests conducted.
- iv) All calculations relevant to mix design.

44. For reinforced concrete work bar bending schedule is to be furnished by the Contractor and approval of the Engineer-in-charge shall be obtained sufficiently in advance.

45. Any cement that the Engineer-in-charge considers has become stale or unsuitable through absorption of moisture from the atmosphere or otherwise due to improper transport/ storage/ handling by the contractors shall be rejected.

46. Any admixture if found necessary for concrete items by the contractor to suit his work could be provided by him at his own cost with prior approval of the Engineer-in-charge. No extra payment will be made for the same by CSL.

47. Empty cement bags are to be stacked in bundles and to be cleared from site at contractor's expense as directed by the Engineer-in-charge.

48. Waste materials like excavated earth, spilled over concrete etc. are to be cleared from site by the contractor. Each area of working is to be cordoned off with necessary signboards and barriers to ensure safe transportation of men and material by CSL in the area as directed by the Engineer-in-charge.

49. AGM (Civil) shall have the right to take possession of or use completed or partially completed part of the work. Such possession or use shall not be deemed to be an acceptance of such work. After completion of all the works, the contractor has to clear all the debris and make the area neat and tidy at the site. The final bill shall be paid only after the certification by safety department to this effect.
50. It is the responsibility of the contractor to follow all safety rules and regulations in force, during the currency of contract in CSL, and any violation of the same during the course of work will be at the risk and cost of the contractor and will attract penal action. Copy of CSL Safety manual is available in the Office of AGM (Civil) and the same may be referred before quoting the rates.
51. Any violation of Safety rules by the contractor, safety department will impose penalty depending on the gravity of violation. Action for debarring the contractor also will be taken in case of repeated violation. Any accident caused due to safety violation and any damage to the company property suitable penalty will be imposed by CSL including termination of contract, if required.
52. Welding Sets without ELCB and Safety Relay shall not be permitted at site. Also flashback arrester is to be provided in all cutting torches. Necessary instructions regarding safety shall be strictly adhered to by the agency.
53. The contractor shall not construct any structure, even of temporary nature, for any purpose at site, except with the written permission of the Engineer-in-Charge of the work and any construction so put up shall be removed by the contractor whenever the Engineer-in- Charge calls upon the contractor to do so.
54. The quantities given in the Schedule of quantities are only approximate and payment will be made as per actual quantity of work done and rate finalized.
55. The drawings given in the tender documents are only for tendering purpose. Final detailed drawings are to be issued during execution at site. There may be changes in drawing as per the requirement of Cochin Shipyard Limited and the quantity may vary on execution of works and no extra claim on rates will be entertained.
56. Before commencement of the work the contractor shall establish at suitable points (as directed by Engineer in charge) reference benchmarks based on the standard benchmark approved by the Engineer in charge. The construction and maintenance of these benchmarks shall be responsibility of the contractor at his cost and risk. These reference benchmarks established by the contractor shall be got checked and approved by the Engineer in charge at suitable intervals of time.

57. The contractor shall be responsible for the true and proper setting out of the works and for the correctness of the position, levels, dimensions, and alignment of all parts of the works and for the provision of all necessary instruments, appliances and labour in connection therewith. If at any time during the progress of the work any error shall appear or arise in the position, level, dimension or alignment of any part of the work, the contractor on being required to do so by the Engineer in charge, shall at his cost rectify such errors to the satisfaction of the Engineer in charge. The checking of any setting out or of any line or level by the Engineer in charge shall not in any way relieve the contractor of his responsibility for the correctness thereof. The contractor shall provide all necessary instruments, appliances and labour required for the Engineer in charge for checking, if any, of the setting out. The contractor shall carefully protect and observe all benchmarks, site levels, pegs and other things used in setting out the works.
58. For all items brought from outside to be used/ consumed for the work, Material Declaration Forms with work order number shall be obtained from CISF Security section of CSL and the same shall be submitted at the office of the Engineer-in-Charge.
59. Secured advance shall be given for non-perishable materials as provided in Clause 15 of Conditions of Contract of GCC. Cement, Sand and different grades of hard granite broken stones will not considered as a non-perishable item. For materials brought without valid Material Declaration Forms issued from CISF Security section of CSL, Secured advance shall be paid against a Bank Guarantee for an equivalent amount. Decision of the Engineer in Charge to this aspect will be final.
60. For works at height and excavation / trench openings and night work, Work permit has to be obtained.
61. For the completed items of the work 75% of the net amount payable on each bill can be paid as advance by CSL at the discretion of AGM (Civil), on a request by the contractor and a recommendation of the Engineer-in-charge and production of an undertaking on approved format by the contractor. Balance amount will be paid after scrutiny and check of the bill.
62. All payments due to the contractor under this contract will be made in Indian Rupees only.
63. The income tax/KVAT/ any other statutory taxes, as per the rules /directions of the concerned departments, prevailing in force at the time of payment of bills will be deducted while making payment or when crediting the amount to the account.
64. The contractors registered under the Kerala value Added Tax Act, 2003 shall produce a Liability Certificate, along with the bill, in relation to the works contract, from the

Assessing Authority showing the tax liability or tax remittance as the case may be and the works contract tax deduction will be made accordingly. Otherwise Works Contract tax @8% in the case of registered contractors and @10% in the case of unregistered contractors will be deducted from the payment released against the contract. In addition Cess as applicable will also be deducted extra.

65. All rejected materials shall be removed within 3 days from the date of written order to that effect. In case the rejected materials are not removed within the specified period mentioned above the same will be removed by CSL at the cost and risk of the contractor.
66. The work should be carried out without damaging any of the underground pipelines or cables coming near the alignment. If any damage occurs to the CSL property, suitable penalty will be imposed by CSL and decision of the Engineer – in Charge shall be final in this regard.
67. Availability of vacant space is limited near the site of work. Contractor has to plan the work in such a manner as to have least amount of stock piling of material and temporary structures or open work area within the Shipyard premises. The contractor should work with close co-ordination with the other agencies working in the same work site at the same time. The space for storage of materials for each work should also be decided by mutual agreement among the contractors working in the same area.
68. A cement godown of capacity to store a minimum of 200 bags of cement or as directed by the Engineer-in-Charge shall be constructed by the contractors at the site of the work for which no extra payment shall be made. It is responsibility of the contractor to keep the cement in bone dry conditions. Double lock provision shall be made to the door of the cement godown. The key shall remain with the CSL Engineer-in-Charge or his authorized representative. The contractor shall be responsible for the watch and ward and safety of the cement godown. Opening the cement store should be done in the presence of CSL officials and contractors representative. The contractor shall facilitate the inspection of the cement godown by the Engineer in Charge.
69. Working drawings shall be prepared to show intersections, if any, of sheet pile, anchor wall, crane beam, drain, drainage pipes, cable duct etc. and submitted by the contractor to the Engineer in charge well in advance to obtain written approval.
70. Measurement shall be as per relevant IS code IS 1200. In the absence of any code dealing with a particular aspect, sound engineering practice shall prevail. Decision of Engineer in charge in this aspect will be final. In case there is discrepancy between Indian Standard code and CPWD specifications, the former shall prevail.

71. Payment to the contractor for removal of soling stone shall be made for the quantity of dismantled soling stones stacked for the purpose of measurement. No reduction for voids will be made. Rate shall include all costs for removal, hauling and stacking of dismantled rubble and disposal of remaining debris within CSL premises as directed by the Engineer in Charge.
72. Circular bands with MS flat for pile reinforcement shall be welded fully on to all the main reinforcement bars. The rate shall include cost for this welding also.
73. Payment for installing in position waling channel shall be for the weight of waling channel erected. All other fixtures like splicing plate, connecting plates, bolts etc if any shall be measured under relevant items.
74. Rates of RCC piling shall be inclusive of making necessary arrangements for moving the piling rig over tie rods without causing damage to tie rods and sand piles, making working platforms etc. for successful completion of work. No extra payment will be made for the same.
75. Wherever earth work is provided in the tender, such items include works such as dewatering, timbering, shoring, strutting etc., whether it is mentioned in the respective items or not. The rate for earthwork includes all the above operations and nothing extra shall be paid for the same.
76. While earthwork excavation is carried out near to any existing structure, utmost care should be taken to avoid any damage to the nearby structure by giving proper shoring etc. No extra claim is admissible on this account. If any damage occurs to the existing structure the same should be rectified at contractor's cost.
77. For fixing tie rods connecting the sheet piles and anchor wall tapered MS washers will be required at both ends of the tie rods. The rates for fixing the tie rods shall be inclusive of the cost of the tapered washers and fixing the same in position by tack welding. No separate payment shall be given for this.
78. The piles are to be cast to a height above the cut off level as directed by the Engineer in Charge and building up of piles shall be avoided. Incase where building up of pile becomes unavoidable it may be resorted to after stripping the pile head to required depth as decided by the Engineer in Charge, cleaning and straightening the reinforcement, building up with same mix of concrete and exactly to the dimension as per drawing and the surplus materials shall be removed at no extra cost by the contractor.
79. The contractor shall strip the pile heads to cut off level using hand chisel/power saw, clean and straighten the reinforcement and cutting edge finished as per drawing and remove and dispose the surplus material as directed by the Engineer in Charge.

80. The rate for all items of work such as excavation, sand filling, gravel filling, and concrete work (whether RCC or plain) etc. includes centering, shuttering, curing and bailing out water/dewatering (wherever necessary) and nothing extra shall be paid for the same for any item.
81. The rate of sheet pile driving shall include cost of doubling and stiffening the double piles by welding 100mm wide 8mm thk MS plates / flats at a minimum of four positions. The stiffeners will not be measured and paid for.
82. Foundation of temporary structures shall also be removed and trenches or holes thus created be filled back with earth. The contractor should clear the site of debris; rubbish and balance materials including any built up structures for construction purpose and clean the area, to the satisfaction of the Engineer in charge when the work is completed, at no extra cost.
83. The final bill shall be paid within the six months from the date of submission of claim (bill) by the contractor or completion of all the items of work which ever is later.
84. It will be mandatory for the bidders to indicate their bank account numbers and other relevant E-payment details so that payments could be made through ECS/EFT mechanism instead of payment through cheques, wherever feasible.
85. Defect liability period shall be one year from date of completion of the work.
86. **IMS GUIDELINES**
  - 86.1 CSL is an ISO 9001, ISO 14001 and ISO 18001 certified firm. All the contractors and subcontractors shall comply with the following measures related to the Quality, Health, and Safety & Environment (QHSE) policy of CSL.
    - 86.1(a) Meeting or exceeding customer requirements.
    - 86.1(b) Assuring quality of the products and service.
    - 86.1(c) Preventing occupational ill health & injuries.
    - 86.1(d) Ensuring safe work sites.
    - 86.1(e) Conserving natural resources.
    - 86.1(f) Preventing / Minimizing air, water & land pollution.
    - 86.1(g) Handling and disposal of Hazardous wastes safely
    - 86.1(h) Complying with statutory & regulatory and other requirements.
    - 86.1(i) Developing skills and motivating their employees.
  - 86.2 Occupational Health, safety & Environmental requirements of CSL shall also include the following:
    - 86.2(a) The contractor (or a sub-contractor performing work on behalf of the contractor) is deemed to comply with the Occupational health, safety and environmental

policy of the company and also to all operational controls/standard operating procedures and shall undertake the work in total compliance with the requirements of the established Integrated Management System (IMS) of the company.

86.2(b) The Contractor shall undertake the work in total compliance with all applicable legal/statutory requirements related to occupational health, safety and environment effective in the state of Kerala.

86.2(c) It is the sole responsibility of the contractor to assure that any sub-contractor/s who shall perform works in company lands/facilities/worksites on behalf of the contractor, is also following all requirements related to the Integrated Management System of the company and the health/safety/environmental Rules effective in the state.

86.2(d) The contractor shall provide/implement and operate/practice all occupational health, safety and environmental management measures/facilities, for their period of contract, in their activities/at their work sites, which shall be required according to the IMS of the company or that required by the health/safety/environmental Rules established and effective in the state, at their own cost.

86.2(e) If any contractor fails to comply with or violates any clauses/requirements of occupational health, safety and environmental Rules effective in the state, in their activities or at work sites and the same shall be exposed to the government or any competent authorities upon inspections, the contractor shall be solely responsible for all liabilities caused by his/her action and shall be responsible for paying the penalty and taking stipulated corrective actions insisted by the authorities within the specified time, at their own cost. Any liability to the company in this regard needs to be compensated by the contractor.

86.2(f) Upon completion of the work, contractor shall clear the area and shall not leave any Occupational health/safety/environmental liabilities to the company, from their activities at the worksites.

86.2(g) Any clarification related to IMS requirements of the yard, may be obtained by the contractor from the Engineer in charge or the authorized representative of the contract, prior to the commencement of work.

87. **PRICE ADJUSTMENT PAYMENT:**

The amounts payable to the contractor shall be adjusted in respect of the rise or fall in the cost of materials like Cement, Tor Steel, Structural Steel (which includes angles, channels, other sections, steel plates, Sheet Piles, Tie Rod etc) & CR Rails by the addition or subtraction of the amounts as determined by the formula prescribed in the following

paragraphs. If the prices of above materials required for execution of the work increase/ decrease, such increase/ decrease shall be paid/ recovered to/from the contractor, as the case may be as per provisions detailed below and the amount of the contract shall accordingly be varied subject to the condition that such increase/ decrease due to variation in prices shall be applicable only for the work done up to the date of completion as specified in the contract. Escalation during the extended period if granted for the reasons attributable to the contractor shall not be payable. Such increase/ decrease due to variation in prices of above materials when due shall be worked out based on the following provisions and formula.

(a) PRICE ADJUSTMENT FOR CEMENT.

Price adjustment on account of increase or decrease of cement price shall be paid/ recovered as per the following formula.

$$\text{Cement Price adjustment} = V \times \frac{(I - I_0)}{I_0}$$

Where: V = 75% of the value of cement supplied as per item No: 71 of tender schedule, during the period for which escalation is under consideration.

I = All India wholesale price index for cement as published by the Economic Adviser to Govt. of India, Ministry of Industry & Commerce for the period for which escalation is payable.

I<sub>0</sub> = All India wholesale index for cement as published by the Economic Advisor to Govt. of India, ministry of Industry and Commerce as on the month of receipt of price bid.

(b) PRICE ADJUSTMENT FOR TOR STEEL

Price adjustment on account of increase or decrease of Tor steel price shall be paid as per the following formulas.

$$\text{Tor Steel price adjustment} = V \times \frac{(I - I_0)}{I_0}$$

Where V = 75% of the value of Tor steel supplied as per item No: 72 of tender schedule, during the period for which escalation is under consideration.

I = All India wholesale price index for MS Bars & Rounds as published by the Economic Adviser to Govt. of India, Ministry of Industry & Commerce for the period for which escalation is payable.

$I_o$  = All India wholesale index for MS Bars & Rounds as published by the Economic Advisor to Govt. of India, ministry of Industry and Commerce as on the month of receipt of Price bid.

(c) PRICE ADJUSTMENT FOR STRUCTURAL STEEL.

Price adjustment on account of increase or decrease of Structural steel (which includes angles, channels, other sections, steel plates, Sheet Piles, Tie Rod etc) price shall be paid as per the following formulas.

$$\text{Structural Steel price adjustment} = X \times V \times \frac{(I - I_o)}{I_o}$$

Where  $V = 75\%$  of the value of works done, which involves use of Structural steel (which includes angles, channels, other sections, steel plates, Sheet Piles, Tie Rod etc), during the period for which escalation is under consideration.

$X =$  Structural Steel component = 70 %

$I =$  All India wholesale price index for Angles, Channels & Sections as published by the Economic Adviser to Govt. of India, Ministry of Industry & Commerce for the period for which escalation is payable.

$I_o =$  All India wholesale index for Angles, Channels & Sections as published by the Economic Advisor to Govt. of India, ministry of Industry and Commerce as on the month of receipt of price bid

(d) PRICE ADJUSTMENT FOR CR RAIL.

Price adjustment on account of increase or decrease of CR Rail price shall be paid as per the following formulas.

$$\text{CR rail price adjustment} = X \times V \times \frac{(I - I_o)}{I_o}$$

Where:  $V = 75\%$  of the value of works done, which involves use of CR Rail (excluding accessories), during the period for which escalation is under consideration.

$X =$  CR Rail component = 70 %

$I =$  All India wholesale price index for Heavy rails as published by the Economic Adviser to Govt. of India, Ministry of Industry & Commerce for the period for which escalation is payable.

$I_o =$  All India wholesale index for Heavy rails as published by the Economic Advisor to Govt. of India, ministry of Industry and Commerce as on the month of receipt of price bid

e) No other escalation whatsoever, except as stated above shall be paid. Any deviation to this clause shall render the offer liable for rejection. Further, the value of the work shall not include any work for which payment is made, at prevailing market rates.

The following principles shall be followed while working out increase/decrease due to variation in prices of materials like Cement, Tor Steel, Structural Steel (which includes angles, channels, other sections, steel plates, Sheet Piles, Tie Rod etc) & CR Rails.

(a) The increase/ decrease due to variation in cost of materials like Cement, Tor Steel, Structural Steel (which includes angles, channels, other sections, steel plates, Sheet Piles, Tie Rod etc) & CR Rails shall be worked out at quarterly intervals and shall be with respect to the cost of work done during the three calendar months of the said work. The first such payment/ recovery shall be made at the end of three months after the month (including) in which the work commenced and thereafter at three months intervals. At the times of completion of work, the last period for payment might become less than three months depending on the date of completion specified in the contract.

(b) The indices (I.) relevant to any quarter for which such increase/ decrease is paid or recovered shall be the arithmetical average of the indices relevant to the three calendar months. If the period up to date of completion specified in the contract after the quarter covered by the last such installment or payment is less than three months for indices (I) shall be the average of indices for the month falling within that period.

(c) The base indices (Io) shall be the one relating to the month in which price bid is received.

(d) 10% of the escalation payment shall be retained from each escalation bill and this shall be released after completion of the work.

(e) Every quarter from the date of award of the contract, the contractor shall submit to the Asst: General Manager a written statement accompanied by authentic documentary evidences of the changes, if any, that have occurred in the specified indices of materials to substantiate the claim for variation in prices.

88. Ground rental charges at the prevailing rate of Rs 5 per Sqm per month will be levied from the contractor and will be recovered from the payment due to the contractor for the land allotted by CSL to him for setting up temporary office space and the same will be recovered from the payment due to the contractor. However, no rental charges will be levied for the material storage area allotted.

89. Mobilization advance with interest at 10% per annum shall be paid against a Bank Guarantee to be executed as per proforma at Annexure IX. The mobilization advance paid

shall not be more than 10% of the contract value and shall be recovered from each running account bill on pro rata basis. Mobilization advance shall be paid on production of the BG after issuing the work order and execution of contract agreement. Also, it is clarified that Bank Guarantee from a Nationalised / Schedule Bank from India only shall be accepted for payment of advance. Along with the recovery towards the mobilization advance, the interest accrued on the advance shall also be recovered from each running account bill. The interest charges shall be levied on the outstanding amount. For calculating interest, the period shall be reckoned up to the date of authorization for payment of the bill by CSL.

90. CSL shall not be liable for, or in respect of, any damages or compensation payable as per law in respect or in consequence of any accident or injury to any workmen or other person in the employment of the contractor or any sub-contractor. The contractor shall indemnify and keep CSL indemnified against all such damages and compensation and against all claims, demands, proceedings, costs, charges and expenses whatsoever in respect thereof or in relation thereto.
91. The contractor shall insure against such liability and shall continue such insurance during the whole of the time that any persons are employed by him on the works. Provided that, in respect of any persons employed by any sub-contractor, the contractor's obligations to insure as aforesaid under this sub-clause shall be satisfied if the sub-contractor shall have insured against the liability in respect of such persons in such manner that CSL is indemnified under the policy, but the contractor shall require such sub-contractor to produce before CSL, such policy of insurance and the receipt for the payment of current premium.
92. The contractor shall report to the Engineer-in-Charge details of any accidents as soon as possible after its occurrence. In the case of any fatal or serious accident, the contractor shall in addition, notify the local police authorities immediately by available means.
93. The contractor shall set up a laboratory at this own expense which shall have facilities for conducting all necessary field test on materials and field and laboratory test on concrete. The laboratory shall be staffed with qualified and experienced Engineers and technicians. The list of equipments required for site laboratory is as per the performa at Annexure X.
94. Each type of aggregate shall be stored separately for the approval of Engineer-in-Charge. Wet aggregate delivered at the site shall be kept in storage for at least 24 hours to ensure adequate drainage before being used for concreting.
95. Quality of cement used for the work shall be 43-grade ordinary Portland cement conforming to I.S. 8112 or 53-grade ordinary Portland cement conforming to I.S. 12269

- or Pozzolona cement conforming to I.S. 1489 unless otherwise approved by the Engineer-in-Charge.
96. Supply of cement shall be taken in 50kg bags bearing manufacture's name and ISI marking. Samples of cement arranged by the contractor shall be taken by the Engineer-in-Charge
  97. The reinforcement steel used for the work will have to be procured by the contractor and shall be Corrosion Resistant Steel (CRS)/ ordinary quality HYSD bars of Fe500 / Fe415 grade conforming to I.S. 1786 unless otherwise approved by the Engineer-in-Charge.
  98. As far as possible, the reinforcement steel/structural steel required for the work shall be procured from Steel Authority of India or Rashtriya Ispat Nigam Ltd. In case steel is not available from the above sources, the contractor shall obtain specific approval from the Engineer-in-Charge well in advance for purchase of steel from other sources.
  99. Bitumen supplied should be of 80/100 Grade produced by BPCL/HPCL/ IOC in sealed drum only (packed bitumen only). The contractor has to bring authentic bill for the same. No bitumen from private agencies will be acceptable.
  100. The steel reinforcement shall be stored by the contractor at site of work in such a way as to prevent distortion and corrosion and nothing extra shall be paid on this account. Bars of different sizes and lengths shall be stored separately to facilitate easy counting and checking.
  101. All materials not herein detailed and fully specified but which may be required for use on works, shall be subjected to the approval of the Engineer-in-Charge without which they shall not be used anywhere in the permanent works
  102. For production of concrete, concrete batching and mixing plant, with minimum capacity of 10 cubic metre per hour shall be installed at site by the contractor. The plant shall be approved by the Engineer-in-Charge and shall be installed at an approved location. All measuring equipments should be maintained in a clean serviceable condition, and their accuracy shall be periodically checked as directed by the Engineer-in-Charge.
  103. Ready mix concrete from out side source shall be allowed subject to the conditions that:  
(i) written permission shall be obtained from the Engineer-in-Charge, (ii) all quality control measures as stipulated by the Engineer-in-Charge are strictly adhered to by the contractor at his cost, (iii) all design mix calculations shall be submitted by the contractor for approval of the Engineer-in-Charge & approval obtained.
  104. The contract involves an obligation of secrecy and the contractor, his agents, servants or sub-contractor or their agents or servants shall observe and comply with the requirements of the Indian Official Secrets Act 1923, and the rules there under or any statutory

modifications or re-enactments thereof. Any breach of this clause shall constitute a breach of the contract. The contractor shall not disclose to anybody the details of drawings prepared for the work without the approval of CSL. No photographs of the CSL area shall be taken or permitted by the contractor to be taken by any of his employees without the approval of the competent authority and no such photographs shall be published, or otherwise circulated without the approval of CSL.

105. **The tenderers shall have to sign in each page of the tender documents with official stamp as a token of his acceptance of the conditions stated therein.**
106. Tenders duly filled shall be deposited in the Tender Box kept in the office of the AGM (Civil), Cochin Shipyard Ltd. before the date and time as specified in the Tender Notice.

Assistant General Manager (Civil)

Signature, Name &  
Address of contractor:  
Date: