

TENDER DOCUMENT

FOR

DRY DOCK AND AFLOAT REPAIR OF

VESSEL/DREDGER/BARGE

(NATIONAL WATERWAY-1)



भारतीय अन्तर्देशीय जलमार्ग प्राधिकरण

(पोत परिवहन मंत्रलय, भारत सरकार)

INLAND WATERWAYS AUTHORITY OF INDIA

(Ministry of Shipping, Govt. of India)

IWT TERMINAL, GAIGHAT, PATNA- 800007

Tel (0612) 2630114, 2360005, 2630012, Fax (0612) 2630012

Web site: <http://iwai.nic.in>, E-mail: iwaiptn@rediffmail.com.

TENDER NO.:12- IWAI/ENGG/P/26/2011-12/ACTION PLAN



भारतीय अन्तर्देशीय जलमार्ग प्राधिकरण
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No. 12- IWAI/ENGG/P/26/2011-12/ACTION PLAN

Date:-

To

Sub: Tender document for dry dock and afloat repair of vessels/dredgers/barges for National Waterway-1

Ref: Your letter No. _____ dt. _____

Sir,

Inland Waterways Authority of India, Kolkata, invites sealed tenders from resourceful and experience ship building/repairing firms for the above mentioned works; completed bids to be submitted at the office of Director, Inland Waterways Authority of India, IWT Terminal cum office, Gaighat, Patna , not later than 1500 hrs IST on or before 15.07.2011.

T tender document for above work is enclosed here

Yours faithfully,

DIRECTOR
IWAI

Encl.:- As above.

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NOTICE INVITING TENDER FOR DRY DOCK AND AFLOAT REPAIR OF VESSEL/DREDGER/BARGE FOR NATIONAL WATERWAY-1

Tender No. 12-IWAI/ENGG/P/26/11-12/ACTION PLAN

1. Sealed tender in two cover system (Cover I - Technical bid and Cover II - Price bid) is being invited from reputed ship building/repairer for Dry dock and afloat repair of vessel/dredger/barge for National Waterway-1 during the period August -september,2011

Sl. No.	Name of Vessel	Type of Repair	Completion Period	Estimated cost	EMD	Place of Work	B.O.Q.
				(in Lakh.)	(in Rs.)		
1	CSD Yamuna	Dry dock	60 days	11.05	22200	Kolkata/Howrah	Annexure - A
2	HSD Sone	Dry dock	60 days	11.35	22750	Kolkata/Howrah	Annexure - B
3	CSD Jalangi	Dry dock	60 days	6.75	13550	Kolkata/Howrah	Annexure - C
4	CSD ID-IV	Dry dock	60 days	10.72	21500	Kolkata/Howrah	Annexure - D
5	HB Nandadevi	Dry dock	60 days	3.87	7800	Kolkata/Howrah	Annexure - E
6	D B Sucheta	Dry dock	60 days	6.28	12600	Kolkata/Howrah	Annexure-F
7	W.B. Lily	Afloat Repair	30 days	1.51	3050	Patna	Annexure-G
8	Tug P.T.Tilak	Afloat Repair	30 days	2.01	4050	Patna	Annexure-H
9	Tug S.C. Bose	Afloat Repair	30 days	2.99	6000	Patna	Annexure-I
10	CL Kasturba	Afloat Repair	30 days	3.24	6500	Patna	Annexure-J
11	CSD Mahananda	Afloat Repair	30 days	0.95	1900	Patna	Annexure-K
12	HB Vindyas	Afloat Repair	30 days	1.05	2150	Patna	Annexure-L
13	HB Hingiri	Afloat Repair	30 days	1.22	2500	Patna	Annexure-M

2. Interested bidders having their own/ on lease ship building/ship repairing yard with dry-dock / afloat repair facility or having infrastructure/ credential for repair of stern gear unit etc. may obtain non-transferable tender document on payment of **Rs. 500/-** (Rupees five hundred only) each in the form of crossed demand draft drawn on a nationalized bank for dry dock and afloat repair of vessel drawn in favour of “**Inland Waterways Authority of India Fund**” payable at Patna. Tender document will be available for sale w.e.f. 4th, July 2011 to 15th, July 2011 during working hours from the office of Director, IWAI, IWT Terminal cum office, Gaighat, Patna-7. Those using downloaded tender document from the website (www.iwai.nic.in) may submit the cost of tender document (**Rs.500.00**) separately along with EMD amount while submitting the bid. A signed declaration stating that no alteration

has been made in any form in the downloaded tender document is to be enclosed with the tender by bidder for downloaded tenders. Without which the bid will be rejected.

3. The tenderer shall have to meet the following pre-qualification criteria:
 - i) The tenderer shall have Ship Building/Repairing back ground,/having proper infrastructure for repair of vessels etc, registered with any Major Port of India, MES, IWT Wing of Indian Army, BSF or any other Central Govt. Dept. involved in the field of Inland vessels or non- registered contractors having credible past experience of working with similar work.
 - ii) Tenderer shall be income tax payee and shall have to submit photocopy of PAN issued by Income Tax Deptt.
 - iii) The average annual financial turnover during last three years ending 31st March of the previous financial year should be at least 30% of the cost of the work as indicated in the table above. Experience of having successfully completed similar nature of works or afloat repair/ blocking & repair of inland vessels during last 7 years ending last day of month previous to the one in which this tender is invited should be either of following:
 - (a) Three similar works costing not less than 40% of the estimated cost, or
 - (b) Two similar works costing not less than 50% of the estimated cost, or
 - (c) One similar works costing not less than 80% of the estimated cost.
 - iv) Tenderer shall have to submit copies of successful work done certificates.
 - v) Tenderer shall have to submit proof of ownership of Dry-dock / afloat facility and its locations along with details of vessels built/ dry-docked / repair at the dock during last 3 years. / having necessary infrastructure for manufacture and supply of worm gear unit.
4. The firm may quote for work of indicated above and completed bids as per terms & conditions mentioned in the tender document should be submitted at the above address latest by 15:00 hrs on 15th July 2011 and same will be opened on same day at 16:00 hrs.
5. IWAI reserves the right to issue of work order for work of dry dock and afloat repair and firm has to complete the works accordingly.
6. IWAI reserves the right to accept or reject any or all bids without assigning any reason and no correspondences shall be entertained in this regard.
7. FOR SPECIAL ATTENTION
 - ALL TENDERERS ARE CAUTIONED THAT TENDERS CONTAINING ANY DEVIATION WHATSOEVER FROM THE TERMS AND CONDITIONS, SPECIFICATIONS AS CONTAINED IN THE TENDER DOCUMENTS ARE LIABLE TO BE REJECTED AS NON-RESPONSIVE.
 - THE TENDER SHALL HAVE TO BE SUBMITTED IN TWO BID FORMAT, THE FIRST PART i.e." TECHNICAL BID" SHOULD CONTAIN THE ENTIRE TENDER DOCUMENT DULY SIGNED IN ALL PLACES, DETAILS OF DRY DOCK/WORKSHOP/AFLOAT REPAIR FACILITIES, DETAILS OF MACHINERIES, TECHNICAL MANPOWER, WORK SCHEDULE, BAR CHART, AND EARNEST MONEY DEPOSIT ONLY BUT NOT THE PRICE BID. SECOND PART i.e." FINANCIAL BID" SHALL CONTAIN ONLY THE RATES OF THE ITEM OF WORK AS IN SCHEDULE A THESE.

- EACH BID SHALL BE SUBMITTED IN SEPARATE SEALED COVERS SUPERSCRIBING AS “TECHNICAL BID” AND “FINANCIAL BID”.
8. SUBMISSION OF TENDER
Duly filled in sealed tender in the form and manner as stated above shall have to be submitted to Director, Inland Waterways Authority of India, IWT Terminal cum office, Gaighat, Patna-7, Bihar on or before 15.00 hrs. of 15th July, 2011. Tenders received late on any account for any reason what so ever and telegraphic tenders will not be entertained.
 9. Earnest Money Deposit (EMD) must accompany each tender and tender not accompanied by the EMD shall be rejected as NON-RESPONSIVE. The EMD for an amount as specified above for each vessel shall be submitted in the technical bid.
 10. OPENING OF TENDERS & EVALUATION
 - (a) Tenders will be opened by the tender evaluation committee at IWAI, IWT Terminal cum office, Gaighat, Patna-7 at 16.00 hrs on 15th July, 2011 in the presence of representative of the tenders who choose to remain present.
 - (b) After the opening of the tenders, the first part i.e. Technical bid will be evaluated by the Tender Evaluation Committee as constituted by the Authority. The second part i.e. Price bid will be opened by the same T.E.C. only for those tenderers who become technically qualified after the evaluation of technical on a suitable date.
 11. TENDER VALIDITY PERIOD
The tender shall remain valid for a period not less than 90 days after the date of opening of tenders.

Tenderer must read “ Information & Instruction for Tenders” and be satisfied himself in respect to scope and the situation of works or any issue as related to the work as considered necessary before the submission of the tenders.
 12. The authority shall have the right to reject any or all the tenders and will not be bound to accept the lowest or any other offer.

DIRECTOR

TENDER FORM

To
The Director
Inland Waterways Authority of India
IWT Terminal cum office
Gaighat , Patna-800007
Bihar, India

1. I/We have read and examined the following documents relating to the

Notice Inviting Tender	3 pages
Information & Instructions for Tenders	6 pages
Warranty	1 page
Schedule	A, B and C
General Conditions of Contract	36 pages
Special and Technical Specifications	4 pages
Contract agreement form	3 pages

2. I/We hereby tender for the execution of the works referred to in the documents to mentioned in paragraph I above upon the terms and conditions contained or referred to in the aforesaid documents and in accordance with the specifications, designs, drawing and other details given therein and at the rate contained in Schedule 'A' and within the period (s) of completion of work and subject to such terms and conditions as stipulated in clause-34.
3. I/We agree to keep our offer valid for 90 days from the date of opening of the tender and also agree not to make any modifications in its terms & conditions on our own accord.

4. A sum of Rs..... (Rupees) only is hereby enclosed in form of Demand Draft drawn on a Nationalized/Schedule Bank as Earnest Money Deposit. I/We agree if I/we fail to keep the validity of tender open, as aforesaid, or if I/We make any modification in the terms & conditions the tender on our own accord and/ or after the acceptance of our tender if I/We fails to commence the execution of the works as provided in the documents referred to in paragraph 1 above, the Earnest Money Deposit thus submitted shall be liable for being forfeited, and the authority shall without prejudice to any other rights or remedy, be at liberty to forfeit said earnest money deposit.
5. Should this tender be accepted I/We agree to abide by and fulfill by all the terms and conditions and provisions of above mentioned tender documents.
6. I/We certify that the tender submitted by me/us is strictly in accordance with terms, conditions, specifications etc. as contained in tender document referred to in paragraph 1 above, and it is further certified that it does not contain any deviations to the aforesaid documents.

Signature along with seal of company

(Duly authorized to sign the tender on behalf of contractor)

Name:

(IN BLOCK LETTERS)

Designation:

Witness:

Signature:

Name:

Postal Address:

Name of Company:

Address:

Telephone No.

Fax No:

Date:

SCHEDULE 'A'

DETAIL OF DRY DOCK/BLOCKING FACILITY / MACHINERY/ EQUIPMENT AS AVAILABLE WITH THE BIDDER INTENDED FOR UNDERTAKING THE PROPOSED WORK FOR DRY DOCK/BLOCKING ETC. REPAIR OF THE VESSEL/DREDGER/BARGE.

Details of Yard offered under this tender for undertaking dry dock facility/afloat repair	
Details of vessels repaired at the yard in last 3 years	
Value of Work done at the above yard in last 3 years	
Infrastructure available at the yard (electricity, illumination, office, powered winches, river front)	

Signature of the Tenderer

SCHEDULE 'B'

PROPOSED WORK PROGRAM FOR DRY DOCK AFLOAT REPAIR ETC. OF
VESSEL/DREDGER/BARGE.

Sl. No.	Details of work	Time period in week								Remarks
		1	2	3	4	5	6	7	8	

SCHEDULE 'C'

DETAILS OF PLANT, TOOLS MACHINERY, DRY-DOCK & EQUIPMENTS AVAILABLE WITH THE CONTRACTOR FOR DEPLOYMENT FOR THE WORK, PAST EXPERIENCE, AVAILABILITY OF TECHNICAL MANPOWER, FINANCIAL CAPACITY ETC.

(To be furnished in Tender)

A. INFRASTRUCTURE

Sl. No.	Name of machinery available with the contractor	Qty	Description size, capacity, model etc.	Condition	Year of present service location

B. INFORMATION ON PAST EXPERIENCE

Sl. No.	Details of works	Name & address of client	Contract value	Period of completion

C. Technical/Supervisory persons both skilled and non skilled.

D. FINANCIAL CAPACITY.

1. Summary of assets and liabilities on basis of audited financial statement of last one year may be supplied. If available copies of audited financial statements may be submitted.

Sl. No.		Amount in Lakhs (Year.....)	Amount in Lakhs (Year.....)	Amount in Lakhs (Year.....)
a.	Total assets			
b.	Current assets			
c.	Total liabilities			
d.	Current liabilities			
e.	Net worth			
f.	Working capital			

E. Name & address of the commercial bank providing financial assistance:

F. Any other information if available to establish financial credibility may also be submitted.

WARRANTY FORM

M/s..... having registered office at..... (herein after referred to as the contractor) having carefully studied all the documents, specifications, designs, drawings etc. pertaining to the contract for works required for the work ofand the local and site conditions and having under taken to execute the said works.

DO HEREBY WARRANT THAT

1. The contractor is familiar with all requirements of the contract.
2. The contractor has investigated the site and satisfied himself regarding the character of the work and local conditions that may affect the work or its performance.
3. The contractor is satisfied that the work can be performed and completed as required in the contract.
4. The contractor accepts all risks directly or indirectly, connected with the performance of the contract.
5. The contractor has no collusion with other contractors, with any of the men of the Engineer In-Charge or with any other person in the Authority to execute the said works according to the terms and conditions of the said contract.
6. The contract has not been influenced by any statement or promise of the Authority or Engineer-In-Charge but only by the contract documents.
7. The contractor is financially solvent.
8. The contractor is experienced and competent to perform the contract to satisfaction of the Engineer In-Charge
9. The statement submitted by the contractor is true.
10. The contractor is familiar with all general and special laws, Acts, Ordinance, Rules & Regulation of the Municipalities, District, State and Central Government that may affect the works, its performance or personnel employed therein or environment.

Date:.....

For and on behalf of the
contractor
Signature:
Name:.....

PART-I

INFORMATION & INSTRUCTIONS FOR TENDERERS

CONTENTS

1. GENERAL.
2. EARNEST MONEY DEPOSIT.
3. BIDDING PROCEDURE.
4. VALIDITY OFFER.

INFORMATION AND INSTRUCTIONS FOR TENDERERS

1. GENERAL:

- 1.1 The detail of the work to be carried out and its scope are given in the “Technical Specifications” of these documents which also indicate a brief description of the work to be executed. The tenderers are advised to study the same carefully before tendering and they shall be deemed to have fully acquainted themselves with the same.
- 1.2 The tenderers in their own interest are also advised to inspect and examine the vessel and satisfy themselves before submitting their tenders, in respect of the site conditions including but not restricting to the following which may influence or affect the work or cost thereof under the contract.
 - (a) Vessel conditions including access to the vessel in connection with the work.
 - (b) Ground conditions including those bearing upon transportation, disposal, handling and storage of materials required for the work or obtained there from.
 - (c) Source of extent of availability of suitable materials including water and labour (Skilled & unskilled) etc. required for work and Laws and Regulations governing their use and employment.
 - (d) The type of equipment and facilities needed, preliminary to/for and in the performance of the work and
 - (e) All other information pertaining to and needed for the work including information as to the risks, contingencies and other circumstances which may influence or affect the work or the cost thereof under this contract.
- 1.3 The tenderer should note that information, if any, in regard to the work site and local conditions as contained in this tender document except for the material agreed to be supplied by the Authority, has been given merely to assist the tenderer and is not warranted to be completed.
- 1.4 The tenderers shall note and bear in mind that the Authority shall bear no responsibility for the lack of acquaintance with site condition, system etc. or any information relating thereto on their part. The consequence of the lack of any knowledge aforesaid, on the part of the tenderers shall be at their risk and cost and no charges or claims whatsoever consequent upon the lack of any information, knowledge or understanding shall be entertained or payable by the Authority.

- 1.5 Immediately upon receipt of the tender documents from the Authority, all the tenderers are urged to submit a written request at least two days prior to the date fixed for pro tender conference to the Engineer-In-Charge issuing the tender enquiry on matters where clarifications or additional information is desired.
- 1.6 The tender shall be submitted in the prescribed form and the same shall be signed in all pages and in all copies properly as laid down hereunder:
- (a) If the tender is submitted by an individual or a proprietary firm, it shall be signed by the proprietor above his full name and full name of his firm with its current business address.
 - (b) If the tender is submitted by a firm in partnership, it shall be signed by all the partners of the firm above their full names and current business address(s) or by a partner holding the power of attorney for the firm by signing the tender in which case a certified copy of the power of attorney shall accompany the tender. A certified copy of the partnership deed and current business address of all the partners of the firm shall also accompany the tenders.
 - (c) If the tender is submitted by a limited company or limited corporation, it shall be signed by a duly authorized person holding the power of attorney for signing the tender in which case a certified copy of the power of attorney shall accompany the tender. Such limited company or corporation may be required to furnish satisfactory evidence of its existence before the contract is awarded.
 - (d) All witness and sureties shall be persons of status and their full names, occupations and address shall be stated below their signatures. All signatures affixed in each page in the tender will be dated.
 - (e) The tenderer or tenderers who himself / themselves has/have tendered for the same works shall not be a witness. Failure to observe this condition shall render invalid and liable to rejection.
- 1.7 The tenderer shall furnish with his tender:
- (a) The details of construction plant, equipments and machinery / infrastructure, docking / blocking facilities, workshop facility and its planning schedule in the format as enclosed with this tender document.
 - (b) Details of technical and supervisory personnel already employed by tenderer which he proposes to utilize for this work and such other personnel which he proposes to employ further for this work.
 - (c) Relevant information on the capacity; financial resources and experience about himself.
- 2.0 a) Earnest money deposit @2% of the estimated value must accompany the tender in favour of “ Inland Waterways Authority of India Fund” in the shape of a account

payee demand draft on any Nationalised Bank or Schedule Bank of India, Payable at PATNA

- b) Tenders not accompanied by Earnest Money Deposit shall be rejected. If during the tender validity period the tenderer withdraw his tender the Earnest Money Deposit shall be forfeited.
 - c) The Earnest Money Deposit shall be refunded to the unsuccessful tenderers within 15 days from the award of work to the qualified bidder.
 - d) Interest shall not be paid on Earnest Money Deposit.
 - e) If any contractor / tenderer withdraws his tender within the validity period or makes any modifications in the terms and conditions of the tender which are not acceptable to IWAI then IWAI without prejudice to any other right or remedy, be at liberty to forfeit the EMD.
- 2.1 In the case of a successful tenderer, the EMD shall be forfeited on the following grounds:-
- a) If the tenderer fails to sign the contract in accordance with clause 3 of conditions of contract on receipt of award of work.

OR

- b) If the tenderer fails to furnish the security deposit in accordance with clause 3 of general conditions of contract.
- 2.2 The rates shall be written both in words and in figures. Tenderer shall also show the total of each item, the total of each schedule and the grand total of the whole contract. Corrections, if any, shall be made by crossing out, initialing, dating and rewriting. In case of conflict between the figures and words in the rates, the later shall prevail.
- 2.3 The Authority shall have the right of rejecting all or any of the tenders and shall not be bound to accept the lowest or any tender or to give any reasons for their decision.
- 2.4 The Tender Evaluation Committee (TEC) shall open the tenders in the presence of tenderers who may be present at the time of opening. If any of the tenderer or his agent is not present at the time of opening of the tender, the TEC shall on opening of the tenders of the absentee tenderer, prepare a statement of the attested and unattested corrections in the tender over his signature. Such a list shall then be binding on the absentee tenderer.
- 2.5 The tenderer shall not be entitled during the period of validity of their offer, without the written consent of the Authority to revoke or withdraw their tenders or vary in any respect the tender given or any term thereof. In case of a tenderer revoking or withdrawing his tender or varying any terms in regard thereof without the consent

of the Authority in writing, his earnest money paid along with the tender shall be forfeited.

- 2.6 The “Notice Inviting Tender” and this “Information and Instruction for Tenderers” shall form the part of the Tender Document.

2.7 BANNED OR DELISTED CONTRACTORS

The bidder shall give a declaration that they have not been banned or de-listed by any Govt. or Quasi Govt. agency or Public Sector Undertaking (PSU).

If the bidder has been banned by any Govt. or quasi Govt. Agency or PSU, this fact must be clearly stated and it may not be a cause of disqualifying the firm. If the declaration is not given, the bids shall be rejected as non-responsive.

3. BIDDING PROCEDURE:

- 3.1 Bids shall be submitted in sealed two cover system (Cover-1: Technical Bid and Cover-2: Financial Bid.)

- 3.2 The technical bid should be duly super scribed as Technical Bid for Dry Dock/AFLOAT repair of VESSEL/DREDGER/BARGE as the case may be and should include the following:

- i) The entire tender duly signed except Schedule ‘IV’-A (Financial –Bid)
- ii) EMD as prescribed.
- iii) Xerox copy of PAN CARD & solvency certificate issued by Nationalized Bank for minimum of Rs. 4 Lakh.
- iv) Details as sought from the tenderer as in schedule- A & B & C.
- v) Bio-data of key personnel & infrastructure, financial condition etc. as in Schedule -C.
- vi) Registration certificate with the labour commissioner.

- 3.3 The second cover should contain the Financial bid of the tender duly placing the quotation in the prescribed form i.e. schedule IV-A duly super scribing “FINANCIAL BID FOR Dry Dock/AFLOAT repair of VESSEL/DREDGER/BARGE” as the case may be. No extra condition or any other statement other than price bid shall be enclosed in Price Bid.

- 3.4 The address of Tendering Firm, name of tenderers and address should be written / types clearly on each envelope.

- 3.5 Both the envelopes should be placed in a single sealed envelope super scribed as “Tender for Dry Dock/AFLOAT repair of VESSEL/DREDGER/BARGE” as the case may be.
- 3.6 The tender may sent by registered post or hand delivered or by courier to reach Director, IWAI, Patna-800007 before the specified closing time to receive tenders.
- 3.7 The second cover i.e. Price Bid will be summarily rejected if the requisite details are not submitted in the “Technical Bid” 1st cover and the firm not found suitable / capable for conducting the work. The Authority also reserves the right not to open the Price Bid of any one or all the tenderers without assigning any reason what so ever.

4. VALIDITY OF PRICES:

The tenderer shall quote the rates for various categories in the prescribed SI-1 and SI-2. The rates quoted shall be firm and shall be kept valid for at least 90 days from the last date of submission of the tender.

PART-II

GENERAL CONDITIONS OF CONTRACT

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CLAUSE -21	MATERIALS
CLAUSE -22	LAWS GOVERNING THE CONTRACT
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CLAUSE -48	ABRITRATION

PART-II

GENERAL CONDITIONS OF CONTRACT

CLAUSE - 1 DEFINITONS

In the contract, the following words & expressions shall, unless context otherwise requires, have the meaning thereby respectively assigned to them:

- i) **Contract:** means the document forming the tender acceptance thereof and the formal agreement executed between the Inland Waterways Authority of India and the contractor together-with documents referred to therein, otherwise it shall mean the notice inviting tender, instructions for tenderers, tender(including the warranty, schedule of quantities and prices and other schedules attached thereto) general conditions and the terms of contract, special condition if any, specifications, designs, drawings and work order thereof etc.
- ii) **Contract sum:** means the amount arrived at by multiplying the quantity shown in the schedule of quantities by the respective category rates as allowed.
- iii) **Contractor:** means the successful tenderer who is awarded the contract to perform the work covered under the tender documents and shall be deemed to include the contractor's successors, executors, representatives or assign approved by the Engineer-in-charge.
- iv) **Authority:** means the Inland Waterways Authority of India. (IWAI) having its office at A – 13, Sector – 1, Noida (U.P.) and includes therein legal representatives, successors and assigns.
- v) **Day:** means a calendar day beginning and ending at mid-night.
- vi) **Drawings:** means the drawing referred to in the specifications and or appended with the tender document, any modifications of such drawings approved in writing by the Engineer In Charge and shall also include drawings issued for actual execution of the work time to time by the Engineer In Charge.
- vii) **Chairman:** means Chairman of Inland Waterways Authority of India.
- viii) **Engineer-In-Charge:** means the Officer nominated by the Authority to sign or cause to sign the Contract Agreement on behalf of the and/or the Engineering Officer appointed by the IWAI or its duly authorized representative to direct, supervise and be In-charge of the works for the purpose of this contract.

- ix) Chief Engineer: means the Chief Engineer of the Authority as the case may be.
- x) Director: means the Director of the Authority, as the case may be.
- xi) Deputy Director: means the Deputy Director of the Authority as the case may be.
- xii) Assistant Director: means the Asstt. Director of the Authority as the case may be.
- xiii) Work Order: Means a letter from the Engineer-in-charge conveying the acceptance of tender/offer subject to such reservations as may have been stated therein.
- xiv) Month: means the one Calendar month.
- xv) Site: means the land and / or other places through which the works are to be executed.
- xvi) Vessel: means the vessel/craft belonging to the Authority for carrying out the work.
- xvii) Urgent works: means any urgent nature which in the opinion of the Engineer-in-charge become necessary at the time of execution and / or during the progress of work to obviate any risk or accident for failure or to obviate any risk of damage to the vessel structure, or required to accelerate the progress of work or which becomes necessary for security or for any other reason the Engineer-in-charge may deem expedient.
- xviii) Week: means seven consecutive calendar days.
- xix) Work/works: means work/works to be executed in accordance with the contract.

CLAUSE: 2 INTERPRETATIONS

- 2.1 Words imparting the singular only shall also include the plural; he includes she and vice-versa unless this is repugnant to the context.
- 2.2 Heading and marginal notes in these conditions shall not be deemed to form part thereof or be taken into consideration in the interpretation of construction thereof of the contract.

CLAUSE: 3 SECURITY DEPOSIT FOR PERFORMANCE

- 3.1. The contractor whose tender is accepted has to enter into an agreement with IWAI and will be required to furnish by way of Security Deposit for the due fulfillment of the contract, such sum as will amount to 10 % of the contract value subject to a maximum value of Rs 5 lakhs or equivalent. The Security amount will be accepted only in the form of crossed Demand Draft on any Nationalized Bank or Scheduled Bank of India or any other internationally reputed bank, in favor of Inland Waterways Authority of India, Fund, payable at Patna.

- 3.2 The Security Deposit thus collected from the contractor will be returned only after satisfactory completion of the work. The Security money shall be deposited within 15 days of award of work. In case of successful tenderer, the earnest money deposited shall be a part of the security deposit. Hence the successful bidder shall have to deposit the balance amount so that the total amount, including the earnest money deposit forms the total security deposit. Interest will not be paid on security deposit.
- 3.3 If the contractor having been called upon by the Authority to furnish the security fails to do so within the specified period, the EMD submitted by the contractor shall be forfeited. It shall be lawful for the Authority:
- i) To recover the amount of such security deposit by deducting the amount from the pending bills of the contractor under the contract or any other contract with the authority.
 - Or
 - ii) To cancel the contract or any part thereof and to carry out the work or authorize to carry out the work at the risk and cost of the contractor.
- 3.4 No claim shall eligible against the Authority either in respect of interest or any depreciation in value of any security.
- 3.5 If the contractor neglects to observe or fails to perform any of his obligations under the contract, it shall be lawful for the Authority to forfeit either in whole or in part, the security deposit furnished by the contractor. However, if the contractor duly performs and completes the contract in all respects and presents in absolute "NO DEMAND CERTIFICATE" in the prescribed form, the Chairman shall refund the security deposit to the contractor after deduction of cost and expenses that the Authority may have incurred and other money including all losses and damages which the Authority is entitled to recover from the Contractor.
- 3.6 In case of delay in the progress of work, the Engineer- in-Charge shall issue to the contractor a memo in writing pointing out the delay in progress and calling upon the contractor to explain the causes for the delay within 3 days of receipt of the memo and 10 days from issuance of memo whichever is earlier. If the Engineer-in-Charge is not satisfied with the explanations offered, he may forfeit the security deposit and / or withhold payment of pending bills in whole or in part and/or get the measures of rectification of progress of work accelerated to the pre-defined level at the risk and cost of the contractor.
- 3.7 All compensation or other sums of money payable by the contractor under the terms of the contract or any other contract or on any other account whatsoever, may be deducted from or paid by the sale of a sufficient part of his security or from the interest arising there from or from any sums which may be due or may become due to the contractor by the Authority on any account whatsoever. Also in the event of the contractor's security deposit being reduced by reasons of such deductions or sale, as aforesaid the contractor shall, within 14 days of receipt of notice of demand from the Engineer-in-Charge make good the deficit in his security deposit.

CLAUSE: 4 REFUND OF SECURITY DEPOSIT

The security deposit less any amount due shall, on demand, be returned to the contractor on the expiry of the defects liability period or on payment of the amount of the final bill payable in accordance with clause 43, whichever is later, provided the engineer-in-charge is satisfied that there is no demand outstanding against the contractor.

CLAUSE: 5 SUFFICIENCY OF TENDER

The contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the works and of the rates quoted in the schedule of Quantities and Prices which shall (except as otherwise provided in the contract) cover all his obligations under the contract and all matters and things necessary for the proper execution and completion of the works in accordance with the provisions of the contract and its maintenance during execution of work.

CLAUSE: 6 CONTRACT DOCUMENTS

- 6.1 The language in which the contract documents shall be drawn up shall be English and if the said documents are written in more than one language, the language according to which the contract is to be constructed and interpreted shall be English and designated as the 'Ruling Language.'
- 6.2 The Contractor shall be furnished free of charge two certified true copies of the contract documents.
- 6.3 One copy of the Contract Documents furnished to the Contractor as aforesaid shall be kept by the Contractor on the Site in good order and the same shall at all reasonable time be available for inspection and use by the Engineer-in-Charge, his representatives or by other Inspecting officers of the Authority.
- 6.4 None of these Documents shall be used by the Contractor for any purpose other than that of this contract.

CLAUSE: 7 DISCREPANCIES AND ADJUSTMENT OF ERRORS

- 7.1 Detailed drawings shall be followed in preference to small-scale drawings and figured dimensions in preference to scaled dimensions. The case of discrepancy between the Schedule of Quantities and prices, the Specifications and/ or the drawings, the following order of precedence shall be observed : -
 - (a) Description in the Schedule of Quantities and Prices.
 - (b) Relevant Specifications and Special Conditions, if any.
 - (c) Drawings.

- (d) General Specifications.
- 7.2 The contractor shall study and compare the drawings, specifications and other relevant information given to him by the Engineer-in-Charge and shall report in writing to the Engineer-in-Charge any discrepancy and inconsistency which he notes. The decision of the Engineer-in-Charge regarding the true intent and meaning of the drawings and specifications shall be final and binding.
- 7.3 Any error in description, quantity or price in Schedule of Quantities and Prices or any omission there from shall not vitiate the Contract or release the Contractor from the execution of the whole or any part of the Works comprised therein according to drawings and specifications or from any of his obligations under the contract.
- 7.4 If on check there is difference in the amount worked out by contractor in the schedule of quantities and prices and General summary the same shall be adjusted in accordance with the following rules:
- (a) In the event of error occurring in the amount column of schedule of quantities and prices as result of wrong multiplication of unit price and quantity, the unit price shall be regarded, as firm and multiplication shall be amended on the basis of the quoted price.
 - (b) All errors in totaling in the amount column and in carrying forward totals shall be corrected.
 - (c) The totals of various sections of schedule of quantities and price amended shall be carried over to the General Summary and the tendered sum amended accordingly. The tendered sum so altered shall, for the purpose of tender, be substituted for the sum originally tendered and considered for acceptance instead of the original sum quoted by the tenderer. Any rounding off of quantities or in sections of schedule of quantities and prices or in General summary by the tenderer shall be ignored.

CLAUSE: 8 DUTIES AND POWERS OF ENGINEER-IN-CHARGE'S REPRESENTATIVE

- 8.1 The duties of the representative of the Engineer-in-Charge are to watch and supervise the works and examine any materials / parts to be used or workmanship employed in connection with the works.
- 8.2 The Engineer-in-Charge may, from time to time in writing, delegate to his representative any of the powers and authorities, vested in the Engineer-in-Charge and shall furnish to the contractor a copy of all such written delegation of powers and authorities. Any written instruction or written approval given by the representative of the Engineer-in-Charge to the contractor within the terms of such delegation shall bind the contractor and the Authority as though it has been given by the Engineer-in-Charge.

- 8.3 Failure of the representative of the Engineer-in- Charge to disapprove any work or materials shall be without prejudice to the power of the Engineer-in-Charge thereafter to disapprove such work or materials and to order the pulling down removal or breaking up thereof. The contractor shall at his own expense again carry out such works as directed by the Engineer-in- Charge.
- 8.4 If the Contractor is dissatisfied with any decision of the representative of the Engineer-in-Charge, he will be entitled to refer the matter to the Engineer-in-Charge who shall thereupon confirm, reverse or vary such decision and the decision of the Engineer-in-Charge in this regard shall be final and binding on the contractor

CLAUSE: 9 ASSIGNMENTS AND SUB-LETTING

The Contractor shall not sub-let, transfer or assign the whole or any part of the work under the contract. Provided that the Engineer-in-Charge may at his discretion, approve and authorize the Contractor to sub-let any part of the work, which in his opinion, is not substantial, after the contractor submits to him in writing the details of the part of the work(s) or trade proposed to be subject, to name of the sub-contractor thereof together with his past experience in the said work/trade and the letter of the proposed sub-contract. Nevertheless any such approval or authorization by the Engineer-in-Charge shall not relieve the contractor from his any or all liabilities, obligations, duties and responsibilities under the contract. The contractor shall also be fully responsible to the Authority for all the acts and omissions of the sub-contractor, his employees and agents or persons directly employed by the contractor. However, the employment of piece rate works shall not be construed as Sub-Letting.

CLAUSE: 10 FACILITIES TO OTHER CONTRACTORS

The contractor shall, in accordance with the requirements of the work as decided by the Engineer-in- Charge, afford all reasonable facilities to other contractors engaged contemporaneously on separate contracts and for departmental labour and of any other agency properly authorized by Authority or statutory body which may be employed at the site for execution of any work not included in the contract which the Authority may enter into in connection with or ancillary to the works. In all matters of conflict of interest, the Engineer-in-Charge shall direct what compromise should be made and his decision shall be final and binding on the parties.

CLAUSE: 11 CHANGES IN CONSTITUTION

Where the contractor is partnership firm, prior approval in writing of the Engineer-in-Charge shall be obtained before any change is made in the

constitution of the firms, where the contractor is an individual or a HINDU undivided family business concern, such approval, as aforesaid, shall like-wise be obtained before the contractor enters into any partnership firm which would have the right to carryout the work undertaken by contractor. If prior approval as aforesaid is not obtained the contractor shall be deemed to have been assigned in contravention to Clause 32 thereof and the same action will be taken and the same consequences shall ensure as provided for in the said clause - 33.

CLAUSE – 12: COMMENCEMENT OF WORK

- 12.1 The contractor shall commence the work(s) within 10 days after the issue of Letter of Award or immediately after placing the vessel at their yard and shall proceed with the same with the expedition and without delay as may be expressly sanctioned or ordered by the Engineer-in Charge. If the Engineer-in-Charge shall without prejudice to any other right or remedy be at liberty to cancel the contract and forfeit the earnest money/security deposit.
- 12.2 The contractor shall strictly adhere to the construction / repair schedule i.e. Schedule 'B' attached with the tender documents.
- 12.3 The contractor shall submit along with his tender the planning, phasing & sequence of repair time & progress within the frame work of schedule B for achieving the completion targets of work(s) as a whole and also each group / sub group of work(s) by which the contractor proposes to carryout the works. Such charts or Programme shall be prepared as per schedule 'B'.

CLAUSE – 13: WORKS TO BE CARRIED OUT IN ACCORDANCE WITH SPECIFICATION DRAWINGS AND ORDERS ETC.

- 13.1 The contractor shall execute the whole and every part of the work in the most substantial and workman like manner and both as regards material and otherwise in every respect in strict conformity with the specification laid down or as may be laid down by the Engineer-in-Charge under the terms of the contract. The contractor shall also conform exactly, fully and faithfully to the designs, drawings specifications and instructions in writing in respect of the work, duly signed by the Engineer-in-Charge as may be issued from time to time.
- 13.2 The contractor shall be entitled to receive, on demand, in addition to the contract documents, in accordance with the provisions of clause 5.2 the documents set forth herein in respect of the work on commencement or during the performance of the contract:
 - (a) Contract drawing and revisions thereof.
 - (b) Specifications or revisions thereof other than standard printed specifications

- (c) Explanations, instructions etc.

Such further drawings, explanation, modifications and instruction, as the Engineer-in-Charge may issue to the contractor from time to time in respect of the work shall be deemed to form integral part of the contract and the contractor shall be bound to carry out the work accordingly.

- 13.3 All instructions and orders in respect of the work shall be given by the Engineer-in-Charge in writing. However, any verbal instructions or order shall be confirmed by the Engineer-in-Charge as soon as practicable without loss of time and only such written instruction shall be deemed to be valid.

CLAUSE – 14: SETTING OUT THE WORKS

- 14.1 The Engineer-in-Charge shall establish / indicate the Bench marks / survey reference points and their elevations.
- 14.2 The contractor shall be responsible for the true and proper setting out of all the work (in relation to the aforementioned Bench marks / survey reference points) for the correctness of the location, grades, dimensions and alignment of all components of the work and for the provision of all instruments, appliances, materials and labour required in connection therewith. If any time during the progress of the work any error shall appear or more in the location, grades, dimensions of alignment of any part of the work the contractor on being required to do so by the Engineer-in-Charge, shall at his own expense, rectify such error to the satisfaction of the Engineer-in-Charge.
- 14.3 The contractor shall afford all reasonable facilities and assistance to the Engineer-in-Charge for checking the setting out and lines and grades established by the contractor. The checking of any setting out or of any line and grade by the Engineer-in-Charge shall not in any way relieve the contractor of his responsibility for the correctness thereof.

CLAUSE – 15: URGENT WORKS

If any urgent work (in respect where the decision of the Engineer-in-Charge shall be final and binding) becomes necessary, the contractor shall execute the same as may be directed, provided the directions are in accordance and confirmatory with provisions in Clause – 8.

CLAUSE – 16: DEVIATIONS

- 16.1 The Engineer-in-Charge shall have powers to make any deviations in the original specifications or drawings or designs of the works or any part thereof that are in his opinion, necessary at the time of or during the course of execution of the works for the aforesaid purpose or for any other reason, if it shall, in the opinion of the Engineer-in-Charge, be desirable, he shall also have the powers to make Deviations, such as (i) Variations (ii) Extra (iii) Additions / Omissions and (iv) Alterations or Substitutions of any kind. No such Deviations in the specification or drawings or designs or Schedule of

Quantities, as aforesaid, shall in any way vitiate or invalidate the contract and any such Deviations which the contractor may be directed to do shall form integral part of the contract as if originally provided therein and the contractor shall carry out the same on the same conditions in all respects on which he agreed to do the works under the contract.

- 16.2 Such items of work, as are required, to be executed at the rates already provided in the schedule of quantities, shall apply in respect of the same item(s) of work to be executed due to Variation.
- 16.3 If requested by the contractor the time for completion of the work shall, in the event of any deviation resulting in additional cost over the contract sum be extended in the proportion which altered, additional or substituted work bears to the original contract sum plus such further additional time as may be considered reasonable by the Engineer-in-Charge whose decision shall be conclusive as to such provision.
- 16.4 Under the circumstances, the contractor shall at any stage not suspend the work on account of non-settlement of rates of such Deviated items.

CLAUSE - 17: CONTRACTORS SUPERVISION

- 17.1 The contractor shall either himself supervise the execution of the works or shall appoint at his own expense, an Engineer as his accredited agent approved by the Engineer-in-Charge, if contractor has himself not sufficient knowledge or experience to be capable of receiving instruction or cannot give his full attention to the works. The contractor or his agent shall be present at the site(s) and shall superintend the execution of the works with such additional assistance in each trade, as the work involved shall require and considered reasonable by the Engineer-in-Charge, directions/instructions given by the Engineer-in-Charge to the contractor's agent shall be considered to have the same force as if these had been given to the contractor himself.
- 17.2 If the contractor fails to appoint a suitable agent as directed by the Engineer-in-Charge, the Engineer-in-Charge shall have full powers to suspend the execution of the works until such date as a suitable agent is appointed by the contractor and takes over the supervision of the work. For any such suspension, the contractor shall be held responsible for delay so caused to the works.

CLAUSE - 18: INSTRUCTION AND NOTICE

- 18.1 Except as otherwise provided in this contract, all notices to be given on behalf of the Authority and all other actions to be taken on its behalf may be given or taken by the Engineer-in-Charge or any officer for the time being entrusted with the functions duties and powers of the Engineer-in-Charge.
- 18.2 All instructions, notices and communications etc. under the contract shall be given in writing and any such oral orders / instructions given shall be

confirmed in writing and no such communication which is not given or confirmed in writing shall be valid.

- 18.3 All instructions, notices and communications shall be deemed to have been duly given or sent to the contractor, if delivered to the contractor, his authorized agent, or left at, or posted to, the address given by the contractor or his authorized agent or to the last known place of abode or business of the contractor or his agent of services by post shall be deemed to have been served on the date when in the ordinary course of post these would have been delivered to him and in other cases on the day on which the same were so delivered or left.
- 18.4 The Engineer-in-Charge shall communicate or confirm the instructions to the contractor in respect of the execution of work in a work site order book maintained in the office of the Engineer-in-Charge and the contractor or his authorized representative shall confirm receipt of such instructions by signing the relevant entries in this book. If required by the Contractor, he shall be furnished a certified true copy of such instruction(s).

CLAUSE -19: PLANT AND EQUIPMENT

- 19.1 The Contractors shall provide and install all necessary plant; equipment and machinery required for the execution of the work under the contract, at his cost and shall use such methods and appliances for the purpose of all the operations connected with the work covered by the contract, which shall ensure the completion of work(s) within the specified time.
- 19.2 The tenderer shall submit the schedule 'C' full detail of his plant, tools, equipments & machinery proposed to be deployed for work(s) along with its planning schedule showing phasing in accordance with the schedule i.e. Schedule 'B'. The schedule 'C' submitted by tenderer should confirm to the schedule i.e. schedule 'B'. The plant equipment & machinery schedule as submitted shall be mutually discussed and finalized with the successful tenderer and approved before award of work and these shall form integral part of agreement.
- 19.3 Subject to the availability of any item(s), plant, equipment and machinery the Authority at the written request of the contractor, may issue to the contractor on hire for being deployed on the work contracted for, at pre- determined rates, terms and conditions at the sole discretion of the Engineer-in-Charge.

CLAUSE – 20: PATENT RIGHTS

The contractor shall indemnify the Authority, its representatives or its employees against any action, claim or proceeding relating to infringement or use of any patent or design or any alleged patent or design rights and shall pay any royalties or other charges which may be payable in respect of any article or material or part thereof included in the contract. In the event of any claim being made or action being brought against the Authority or any agent, servant

or employee of the Authority in respect of any such materials as aforesaid the contractor shall immediately be notified thereof. Provided that such indemnity shall not apply when such infringement has taken place in complying with the specific directions issued by the Authority but the contractor shall pay any royalties or other charges payable in respect of any such use, the amount so paid being reimbursement to the contractor only if the use was the result of any drawings and or specifications issued after submission of the tender.

CLAUSE – 21: MATERIALS

- 21.1 The contractor shall at his own expenses provide / arrange all materials required for the bonafide use on work under the contract.
- 21.2 All materials parts to be provided by the contractor shall be in conformity with the specifications laid down in the contract and the contractor shall furnish from time to time proof and samples, at his cost, of the materials parts as may be specified by the Engineer-in-Charge shall also have powers to have such tests, in addition to those specified in the contract, as may be required and the contractor shall provide all facilities to carry out the same. The cost of materials parts consumed in such tests and also expenses incurred thereon shall be borne by the contractor in all cases and also where such tests which are in addition to those provided in the contract disclose that the materials are in conformity with the provisions of the contract.
- 21.3 The Engineer-in-Charge or his representative shall be entitled at any time to inspect and examine any materials parts intended to be used in or the works, either on the site or at factory or workshop or other place(s) where such materials are assembled, fabricated, manufactured or any place where these are lying or from where these are being obtained. For this, purpose, the contractor shall afford such facilities as may be required for such inspection and examination.

CLAUSE - 22: LAWS GOVERNING THE CONTRACT

The Courts at Delhi only shall have the jurisdiction for filing the award of the arbitration and for any other judicial proceedings.

CLAUSE - 23: WATCHING AND LIGHTING

The Contractor shall provide and maintain at his expense all lights, guards, fencing and watching when and where necessary or as required by the Engineer-in- Charge for the protection of the works or for the safety and convenience of those employed on the works or the public.

CLAUSE - 24: WORK DURING NIGHT OR ON SUNDAYS AND HOLIDAYS

- 24.1 Subject to any provisions to the contrary contained in the contract, none of the works shall be carried out during national holidays without the permission in writing of the Engineer-in-Charge. However, when work is unavoidable or

necessary for safety of life, property or works, contractor shall take necessary action immediately and advise the Engineer-in-Charge accordingly.

- 24.2 The Engineer-in-Charge at its discretion may, however, direct the contractor that the work may be carried out on holidays, Sundays and/ or extra shifts to ensure completion of works under the contract as scheduled.

CLAUSE - 25: LABOUR

- 25.1 (a) The contractor shall employ labour in sufficient numbers to maintain the required rate of progress and of quality to ensure workmanship of the degree specified in the contract and to the satisfaction of the Engineer-in-Charge. The Contractor shall not employ in connection with the works any person who has not completed eighteen years of age the minimum age specified in Indian Labour Law.
- (b) If any foreigner is employed by the contractor to work within the site the later shall ensure that such foreigner possesses the necessary special permit issued by the civil Authorities in writing and also comply with the instructions issued therefore from time to time. In the event of any lapse in this regard on the part of such foreigner the contractor shall be personally held responsible for the lapse & Authority shall not be liable in any event.
- (c) The Contract is liable for cancellation if either the contractor himself or any of his employee is found to be a person who has held Class-I post under the Authority immediately before retirement and has within two years of such retirement accepted without obtaining the previous permission of the Authority or of the Chairman as the case may be and employment as contractor for, or in connection with the execution of the public works, or as an employee of such contractor. If the contract is terminated on account of the failure of the contractor to comply with the above clause, the Authority shall be entitled to recover from him such damages as may be determined by the Engineer-in-Charge with due regard to the inconvenience caused to the Authority on account of such termination without prejudice to the Authority's right to proceed against such officer.
- 25.2 The contractor shall furnish and deliver fortnightly to the Engineer-in-Charge, a distribution return of the number and description by trades of the works of people employed on the works. The contractor shall also submit on the 4th and 19th of every month for the period of second half of the preceding month and first half of the current month respectively to the Engineer-in-Charge, a true statement in respect of the following.
- i) Any accidents if occurred during the said fortnight showing the circumstances under which they happened and the extent of damage and injury caused by them and.

- ii) The number of female workers who have been allowed maternity benefit as provided in the Maternity Benefit Act 1961 or Rules made there under and the amount paid to them.
- 25.3 The Contractor shall pay to labourer employed by him either directly or through sub-contractors wages not less than wages as defined in contract labour (regulation and abolition) Act 1970 with general rules framed there under and amendments made from time to time.
- 25.4 The Contractor shall in respect of labour employed by him either directly or through sub-contractor complies with or cause to be complied with the contract labour (Regulation and Abolition) Act 1970 and Rules framed there under in regard to all matters provided therein.
- 25.5 The Contractor shall comply with the provision of all the Acts Laws, any Regulation or Bye Laws of any Local or other Statutory Authority applicable in relation to the execution of works such as:
- i) Payment of Wages Act, 1936 (Amended)
 - ii) Minimum Wages Act, 1948 (Amended).
 - iii) The Contract Labour (Regulation & Abolition) Act, 1970 with Rules framed there under as amended.
 - iv) Workmen Compensation Act, 1923 as amended by Amendment Act no.65 of 1976.
 - v) Employer's Liability Act 1938 (Amended)
 - vi) Maternity Benefit Act. 1961 (Amended)
 - vii) The Industrial Employment (Standing orders) Act 1946 (Amended).
 - viii) The Industrial Disputes Act. 1947 (Amended)
 - ix) Payment of Bonus Act.1965 and Amended Act No. 43 of 1977 and No. 48 of 1978 and any amended thereof:
 - x) The Personal Injuries (Compensation Insurance) Act 1963 and any modifications thereof and rules made there under from time to time. The Contractor shall take into account all the above and financial liabilities in his quoted rates and nothing extra, whatsoever, shall be payable to him on this account.
- 25.6 The Contractor shall be liable to pay his contribution and the employees contribution to the State Insurance Scheme in respect of all labour employed by him for the execution of the contract, in accordance with the provision of "the Employees State insurance Act 1948" as amended from time to time. In case the Contractor fails to submit full details of his account of labour

employed and the contribution payable the Engineer-in- Charge shall recover from the running bills of the contribution an amount of contribution as assessed by him. The amount so recovered shall be adjusted against the actual contribution payable for Employees State Insurance.

- 25.7 The Engineer-in-Charge shall on a report having been made by an inspecting officer as defined in the Contract Labour (Regulation and Abolition) Act and Rules or on his own in his capacity as Principal Employer, have the power to deduct from the amount due to the contractor any sum required on estimated to be required for making good the loss suffered by worker(s) by reason of non-fulfillment of the conditions of the Contract for the benefit of Workers, nonpayment of wages or of deduction made from him for wages which are not justified by the terms of the contract or non- observance of the said Act and Rules framed there under with amendments made from time to time.
- 25.8 The Contractor shall indemnify the Authority against any payments to be made under and for observance of the Regulation Laws, Rules as stipulated in Clause-23.5 above without prejudice to his right to claim indemnity from his sub-contractors. In the event of the contractor's failure to comply with the provisions of all the Act/Laws stipulated in Clause-23.5 or in the event of decree or award or order against the contractor having been received from the competent authority on account of any default or breach or in connection with any of the provisions of the Act/Law/Rules mentioned in Sub-Clause 23.5 above, the Engineer-in-Charge without prejudice to any other right or remedy under the contract shall be empowered to deduct such sum or sums from the Bill of the contractor or from his security deposit or from other payment due under this contract or any other contract to satisfy within a reasonable time the provisions of the various Act/Laws/Rules/Codes as mentioned under Sub-Clause 23.5 above, on the part of the contractor under the contract on behalf of and at the expenses of the contractor and make payment and /or provide amenities/ facilities/services accordingly. In this regard, the decision of the Engineer-in-Charge shall be conclusive and binding on the contractor.
- 25.9 In the event or the Contractor committing a default or breach of any of the provisions of the aforesaid Contract's Labour (Regulation and Abolition) Act and Rules as amended from time to time or furnishing any information or submit ting or filling any form/Register/Slip under the provisions of these Regulations which is materially incorrect then on the report of the Inspecting officer as defined in the relevant Acts and Rules as referred in Clause 23.5 above, the Contractor shall without prejudice to any other liability pay to the Authority a sum not exceeding Rs.50/- (Rs. Fifty only) as liquidated damages for every default, breach or furnishing, making, submitting, filling materially incorrect statement as may be fixed by the Engineer-in-Charge. The decision of the Engineer-in-Charge in this respect shall be final & binding.
- 25.10 The Contractor shall at his own expenses Comply with or cause to be complied with the Provisions/ Rules provided for welfare and health of Contract Labour in the Contract Labour (Regulation and Abolition) Act and other relevant Acts and Rules framed there under or any other instructions

issued by the Authority in this regard for the protection of health and for making sanitary arrangements for workers employed directly or indirectly on the works. In case the contractor fails to make arrangements as aforesaid, the Engineer-in-Charge shall be entitled to do so and recover the cost thereof from the contractor.

25.11 The Contractor shall at his own expense arrange for the safety or as required by the Engineer-in-Charge, in respect of all labour directly or indirectly employed for performance of the Works and shall provide all facilities in connection therewith. In case the contractor fails to make arrangements and provide necessary facilities as aforesaid, the Engineer-in-Charge shall be entitled to do so and recover the cost thereof from the Contractor. But this will not absolve the contractor of his responsibility or otherwise thereof.

25.12 Failure to comply with "Provisions/Rules made for Welfare and Health of Contract Labour" Safety Manual, or the provisions relating to report on accidents and grant of maternity benefits to female workers and the relevant Act/Rules referred in clause 25.5 above shall make the contractor liable to pay to the Authority as liquidated damages an amount not exceeding Rs. 50/- for each default or materially incorrect statement. The decision of the Engineer-in-Charge in such matters based on reports from the inspecting Officers as defined in the relevant Acts and Rules as referred in clause 23.5 above shall be final and binding and deductions for recovery of such liquidated damages may be made from any amount payable to the contractor. In the event of any injury, disability or death of any workmen in or about the work employed by the contractor either directly or through his sub-contractor, contractor shall at all time indemnify and save harmless the Authority against all claims, damages and compensation under the Workmen Compensation Act, 1923 as amended from time to time or in other Law for the time being in force and Rules thereunder from time to time and also against all costs, charges and expenses of any smooth action by proceedings arising out of such accidents or injury, disability or death of a workmen and against all sum or sums which may with the consent of the contractor be paid to compromise or compound any claim in this regard. If any award, decree or order is passed against the contractor for recovery of any compensation under the Workmen Compensation Act, 1923, for any injury, disability or death of a workman by any competent court, the said sum or sums shall be deducted by the Engineer-in-Charge from any sum then due or that may become due to the contractor or from his security deposit or sale thereof in full or part under the contract or any other contract with the Authority towards fulfillment of the said decree, award or orders.

25.13 Provided always that the contractor shall have no right to claim payments/claims whatsoever on account of his compliance with his obligations under this clause and Labour Regulation.

25.14 REMOVAL OF CONTRACTOR'S MEN

The Contractor shall employ for the execution of the works only such persons as are skilled and experienced in their respective trades and Engineer-in-Charge shall be at liberty to object to and require the contractor to remove

from the works any persons employed by the Contractor for the execution of the works who, in the opinion of the Engineer-in-Charge, misconduct himself or is incompetent or negligent in the proper performance of his duties. The contractor shall forthwith comply with such requisition and such person shall not be again employed upon the works without permission of the Engineer-in-Charge.

CLAUSE – 26: MATERIALS OBTAINED FROM EXCAVATION AND TREASURE TROVE, FOSSILS, ETC.

- 26.1 Materials of any kind obtained from excavation on the site shall remain the property of the Authority and shall be disposed off as directed by the Engineer-in-Charge.
- 26.2 However if any of the materials thus obtained from excavation on the site is such as can be used in the execution of the work under the contract, the contractor will be allowed to use the same free of cost (except that any amount of royalty paid for in this regard by the Authority shall be recoverable from the contractor) for the aforesaid purpose provided the same is found suitable and is approved by the Engineer-in-Charge.
- 26.3 Fossils, coins, articles of value, structures and other remains or things of geological or archeological interest discovered on the site shall be the absolute property of the Authority. The contractor shall take reasonable precautions to prevent his labour or any other person from removing or damaging any such article or thing and shall acquaint the Engineer-in-Charge with such discovery and carryout the Engineer-in-Charge's directions as to the disposal of the same at the expense of the Authority.

CLAUSE – 27: FORCE MAJEURE

- 27.1 The term Force Majeure shall herein mean Riots (other than among the contractor's employees), Civil Commotion (to the extent no insurable), war (whether declared or not), invasion, act of foreign enemies, hostilities, civil war, rebellion, revolution, insurrection, military or usurped power, damage from aircraft, nuclear fission, acts of God, such as earthquake (above 7 magnitude on Richter Scale), lightning, unprecedented floods, fires not caused by contractor's negligence and other such causes over which the contractor has no control and are accepted as such by the Engineer-in-Charge, whose decision shall be final and binding. In the event of either party being rendered unable by Force Majeure to perform any obligation required to be performed by them under this contract, the relative obligation of the party affected by such Force Majeure shall be treated as suspended for the period during which such Force Majeure cause lasts, provided the party allowing that it has been rendered unable as aforesaid, thereby shall notify within 15 days of the alleged beginning and ending thereof giving full particulars and satisfactory evidence in support of such cause.
- 27.2 For delays arising out of Force Majeure, the bidder shall not claim extension in completion date for a period exceeding the period of delay attributable to

the causes of Force Majeure and neither the Authority nor the bidder shall be liable to pay extra costs provided it is mutually established that Force Majeure conditions did actually exist.

- 27.3 If any of the Force Majeure conditions exists in the places of operation of the bidder even at the time of submission bid, he shall categorically specify in his bid and state whether they have been taken into consideration in their quotations.

CLAUSE - 28: LIABILITY FOR DAMAGE, DEFECTS OR IMPERFECTIONS AND RECTIFICATION THEREOF

- 28.1 If the contractor or his labour or sub-contractor, injure, destroy or damage road, fence, enclosures, water pipe, cables, buildings, drains, electricity or telephone posts, wires, trees, grass line, cultivated land in the area in which they may be working or in the area contiguous to the premises on which the work or any part of it is being executed or if any damage is caused during the progress of work, the Contractor shall upon receipt of a notice in writing in that behalf from the Engineer-in-Charge, make the same good at his cost.
- 28.2 If it appears to the Engineer-in-Charge or his representative at any time during to or prior to the expiration of the Defects Liability period that any work has been executed with unsound, imperfect or unskilled workmanship or that any materials or articles provided by the Contractor for execution of the work are unsound or of a quality inferior to that contracted for, or otherwise not in accordance with the Contract, or that any defect, shrinkage or other faults found in the work arising out of defective or improper materials or workmanship, the Contractor shall, upon receipt of a notice in writing in that behalf from the Engineer-in-Charge forthwith rectify or remove and reconstruct the work so specified in whole or in part, as the case may be, and/or remove the materials/articles so specified and provide other proper and suitable materials at his expense.

CLAUSE – 29: CONTRACTOR'S LIABILITY AND INSURANCE

- 29.1 From commencement to completion of the work(s) as a whole, the Contractor shall take full responsibility for the care thereof and for taking precautions to prevent loss or damage. He shall be liable for any damage or loss that may happen to the works or any part thereof and to the Authority's Plant, Equipment and Material (hired or issued to the Contractor) shall be in good order and condition and in conformity in every respect with the requirements of the Contract and instructions of the Engineer-in-Charge.
- 29.2 i) Neither party to the contract shall be liable to the other in respect of any loss or damage which may occur or arise out of "Force Majeure" to the works or any part thereof on to any material or article at site but not incorporated in the works or to any person or anything or material whatsoever or either party provided such a loss or damage could not have been foreseen or avoided by a prudent person and the either

party shall bear losses and damages in respect of their respective men and materials. As such liability of either party shall include claims/ compensations of the third party also.

- ii) Provided, however, in an eventuality as mentioned in sub-clause - 29.2 (i) above, the following provisions shall also have effect :
 - (a) The Contractor shall, as may be directed in writing by the Engineer-in-Charge proceed with the completion of the works under and in accordance with the provisions and conditions of the contract, and
 - (b) The Contractor shall, as may be directed in writing by the Engineer-in-charge, re-execute the works lost or damaged, remove from the site any debris and so much of the works as shall have been damaged and carry the Authority's T & P, Plant and Equipment, Material etc. to the Authority's store. The cost of such re-execution of the works, removal of damaged works and carrying of Authority's store shall be ascertained in the same manner as for deviations and this shall be added to the contract sum. Provided always that the Contractor shall, at his own cost, repair and make good so much of the loss or damage as has been occasioned by any failure on his part to perform his obligations under the contract or not taking precautions to prevent loss or damage or minimise the amount of such loss or damage, Final assessment of loss or damage shall be decided by the Engineer-in-Charge and his decision shall be final and binding.
- 29.3 The contractor shall take special precautions to see that public places and roads adjacent to contractor's yard are not blocked at anytime either by his material or by his workmen. The roads are to be kept always clear and no equipment/materials shall be stacked.
- 29.4 The navigable waterways shall not be blocked by Contractor's vessels. The anchors dropped in the waterways shall be properly marked and removed after done with.
- 29.5 The contractor shall indemnify and keep indemnified the Authority against all losses and claims for death, injuries or damage to any person or any property whatsoever which may arise out of or in consequence of the construction and maintenance, of works during the contract period and also against all claims, demands, proceedings, damages, costs, charges and expenses whatsoever in respect of or in relation thereto, and such liabilities shall include claims/compensations of the third party.
- 29.6(a) Before commencing execution of the work, the Contractor shall without in any way limiting his obligations and responsibilities under this condition, insure against any damage, loss or injury which may occur to any property (excluding that of the Authority but including the Authority building rented to the contractor wholly or in part and any part of which is used in part and any part of which is used by him for storing combustible materials) public liability by arising out of the carrying out of the contract. For this

purpose the contractor shall take out, pay all costs and maintain throughout the period of his contract public liability with the following coverage.

- i) Public liability limits for bodily injury or death not less than Rs. 1,00,000 for one person and Rs. 2,00,000 for each accident.
 - ii) Property liability limits for each accident not less than Rs. 1,00,000 ;
 - iii) The Contractor shall prove to the Engineer-in Charge from time to time that he has taken out all the insurance policies referred to above and has paid the necessary premiums for keeping the policies alive till expiry of the Defects Liability Period.
- (b) The Contractor shall ensure that similar insurance policies are taken out by his sub-contractor (if any) and shall be responsible for any claims or losses to the Authority resulting from their failure to obtain adequate insurance protection in connection thereof. The Contractor shall produce or cause to be produced by his sub-contractors (if any) as the case may be, relevant, policy or policies and premium receipt as and when required by the Engineer-in-Charge.
- (c) If the contractor and/or his sub- contractor (if any) shall fail to effect and keep in force the insurance referred to above or any other insurance which he/they may be required to effect under the term of the Contract then and in any such case the Authority may, without being bound to effect and keep in force any such insurance and pay such premium or premiums as may be necessary for that purpose and from time to time deduct the amount so paid by the Authority from any moneys due or which may become due to the contractor or recover the same as a debt due from the contractor.
- (d) The contractor shall at his own expense arrange for the safety provisions as required in respect of the works covered under this contract as per the instruction of Engineer-in-charge. In case, the contractor fails to comply with the provisions of the safety the Engineer- in-Charge shall be entitled to and make the necessary arrangements at the risk and cost of the contractor. This will, however, not absolve the Contractor of his overall responsibility to execute the works under the contract.

CLAUSE – 30 : SUSPENSION OF WORKS

- 30.1 The contractor shall on the order of the Engineer-in-Charge suspend the progress of the works or any part thereof for such time or times and in such manner as the Engineer-in-Charge may consider necessary and shall during such suspension properly protect and secure the work so far as is necessary in the opinion of the Engineer-in-Charge. If such suspension is:-

- a) Provided for in the contract, or
 - b) Necessary for the proper execution of the works or by reason of weather conditions or by some default on the part of the contractor are necessary for the safety of the works or any part thereof. The contractor shall not be entitled to extra costs (if any) incurred by him during the period of suspension of the work. But in the event of any suspension ordered by the Engineer-in-Charge for reasons other than aforementioned and when each such period of suspension exceeds 14 days, the contractor shall be entitled to such extension of time for completion of the works as the Engineer-in-Charge may consider proper having regard to the period or periods of such suspension and to such compensation as the Engineer-in-Charge may consider reasonable in respect of salaries or wages paid by the contractor to his employees during the period of such suspension.
- 30.2 If the progress of works or any part thereof is suspended on the order of the Engineer-in-Charge for more than three months at a time the contractor may serve a written notice on the Engineer-in-Charge requiring permission within 15 days from the receipt thereof to proceed with the works or that part thereof in regard to which progress is suspended and if such permission is not granted within that time the contractor by a further written notice so served may (but is not bound to) elect to treat the suspension where it affects part only of the works as omission of such part or where it affects the whole of the works as an abandonment of the contract by the Authority.

CLAUSE – 31: FORECLOSURE OF CONTRACT IN FULL OR IN PART DUE TO ABANDONMENT OR REDUCTION IN SCOPE OF WORK

If at any time after acceptance of the tender the Authority decides to abandon or reduce the scope of the works for reason whatsoever and hence does not require the whole or any part of the works to be carried out, the Engineer-in-Charge shall give notice in writing to that effect to the contractor and the Contractor shall have no claim to any payment of compensation or otherwise whatsoever, on account of any profit or advantage which he might have derived from the execution of the works in full but which he could not derive in consequence of the fore closure of the whole or part of the works.

CLAUSE – 32 : TERMINATION OF CONTRACT ON DEATH

If the Contractor is an individual or a proprietary concern and the individual or the proprietor dies, or if the Contractor is a partnership concern and one of the partners dies, then, unless the Engineer-in-Charge is satisfied that the legal representatives of the individual contractor or of the proprietor of the proprietary concern and in the case of partnership, the surviving partners are capable of carrying out and completing the contract, the Engineer-in-Charge shall be entitled to terminate the Contract as to its incomplete part without the

Authority being in anyway liable to payment of any compensation whatsoever on any account to the estate of the deceased Contractor and/or to the surviving partners of the Contractor's firm on account of termination of the Contract. The decision of the Engineer-in-Charge that the legal representatives of the deceased contractor or the surviving partners of the Contractor's firm cannot carry out and complete the works under the contract shall be final and binding on the parties. In the event of such termination, the Authority shall not hold the estate of the deceased Contractor and/or the surviving partners of the Contractor's firm liable for damages for not completing the contract. Provided that the power of the Engineer-in-Charge of such termination of contract shall be without prejudice to any other right or remedy which shall have accrued or shall accrue to him under the contract.

CLAUSE- 33: CORRUPT PRACTICE & TERMINATION OF CONTRACT IN FULL OR IN PART

33.1 If the contractor

- i) commits default in complying with or commits breach of any of the terms and conditions of the contract and does not remedy it or take effective steps to remedy it immediately and not later than 10 days in any case after a notice in writing is given to him in that behalf by the Engineer-in-Charge; or
- ii) fails to complete the work (s) or any item of work (s) within the time or any extended time under the contract and does not complete the work (s) or any item of works within the period specified in a notice given in writing in that behalf by the Engineer-in-Charge ; or
- iii) assigns, transfers, sublets (engagement of labour on a piece-work basis or of labour with materials not being incorporated in the work shall not be deemed to be subletting) or attempts to assign, transfer or sublet the entire works or any portion thereof without the prior written approval of the Engineer-in-Charge. The Engineer-in-Charge shall have powers to terminate the contract in full or in part as aforesaid without prejudice to any other right or remedy which shall have accrued or shall accrue of which cancellation notice in writing to the Contractor under the hand of the Engineer-in-Charge shall be conclusive evidence.

33.2 Corrupt Practice

The Contractor shall not offer or to give to any person in the employment of the Authority or working under the orders of the Chairman any gift or consideration of any kind as an inducement or reward for doing or forbearing to do or for having done or forborne to do any act in relation to the obtaining or execution of the contract or any other contract with the purchaser or for showing or forbearing to show favour or disfavour to any person in relation to the contract or any other contract with the purchaser. Any breach of the aforesaid condition by the contract, or any one employed, by him or acting

on his behalf (whether with or without the knowledge of the Contractor) or the commission of any offence by the Contractor or by

any one employed by him or acting on his behalf under Chapter IX of the Indian Penal Code 1860 or the Prevention of Corruption Act, 1947 or any other Act enacted for the prevention of corruption by Public Servant shall entitle the Chairman to cancel the contract and all or any other contracts with the Contractor and to recover from the Contractor the amount of any loss arising from such cancellation in accordance with the provisions of General condition and Special conditions.

- 33.3 The Engineer-in-Charge shall, on such termination of the contract, have powers
- i) To take possession of the site of work under the contract as well as the land / premises allotted to the contractor for his preliminary, Enabling and Ancillary works and
 - ii) Also any materials, constructional plant, equipment, implements, stores, structures etc. thereon. The Engineer-in-Charge shall also have powers to carry out the incomplete work by any means or through any other agency or by himself at the risk and cost of the contractor. In such agencies shall be credited to the contractor at his contract prices and the contractor shall pay the excess amount, if any, incurred in completing the work as aforesaid, as stipulated under sub-clause 30.5 hereunder.
- 33.4 On termination of the contract in full or part, the Engineer-in-Charge may direct that a part or whole of such plant, equipment and materials, structures be removed from the site of the work as well as from the land/premises allotted to the contractor for his preliminary, enabling and ancillary works, within a stipulated period if the contractor shall fail to do so within the period specified in a notice in writing by the Engineer-in-Charge, the Engineer-in-Charge may cause then to be sold, holding the net proceeds of such sale to the credit of the contractor, which shall be released after completion of works and settlement of amounts under the contract.
- 33.5 If the expenses incurred or to be incurred by the Authority for carrying out and completing the incomplete work or part of the same, as certified by the Engineer-in-Charge, are in excess of the value of the work credited / to be credited to the contractor, the difference shall be paid by the contractor to the Authority. If the contractor fails to pay such an amount, as aforesaid, within thirty days of receipt of notice in writing from the Engineer-in-Charge, the Engineer-in-Charge shall be empowered to recover such amount from any sum due to the contractor on any account under this or any other contract or from his security deposit or otherwise.
- 33.6 Also, the Engineer-in-Charge shall have the right to sell any or all of the contractor's unused materials, constructional plant, equipment, implements, temporary building / structures etc. and apply the proceeds of sale thereof

towards the satisfaction of any sums due from the contractor under the contract and if thereafter there may be any balance outstanding from the contractor, the Engineer-in-Charge shall have powers to recover the same in accordance with the provisions of the contract.

- 33.7 The contractor shall not construct any structure even of a temporary nature for any other purpose on IWAI office premises & Engineer-in-Charge's representative's office or houseboat, or any such things except with the written permission of the EIC and any such construction, so put up shall be removed by the contractor whenever the EIC or his representative calls upon the contractor to remove. Any dispute or difference in respect of either the interpretation effect or application of the above conditions or of the amount recoverable there under by the purchaser from the Contractor, shall be decided by the Chairman.

CLAUSE - 34: COMPLETION TIME AND EXTENSIONS

- 34.1 Time allowed for execution of the work as specified or the extended time, if any, in accordance with these conditions shall be essence of the contract.

- 34.2 However, if the work is delayed on account of:

- i) Increase in the quantity of work to be done under the contract as per clause 16, or
- ii) Suspension of work as per clause 30 ; or
- iii) Rebuilding of work as per clause 31; or
- iv) "Force Majeure" or
- v) Any other cause which, in absolute discretion of the Engineer-in-Charge is beyond the contractor's control; then immediately upon the happening of any such events as aforesaid, the contractor shall inform the Engineer-in-Charge accordingly, but the contractor shall nevertheless use constantly his best endeavors to prevent and/or make good the delay and shall do all that may be required in this regard. The Contractor shall also request, in writing, for extension of time, to which he may consider himself eligible under the contract, within fourteen days of the date of happening of any such events as indicated above.

- 34.3 In any such case as may have arisen due to any of the events, as aforesaid, and which may have been brought out by the contractor in writing, the Engineer-in-Charge may give a fair and reasonable extension of time, after taking into consideration the nature of the work delayed and practicability of its execution during the period of extension. Provided in the event of non-receipt of a request for such extensions from the contractor for reasons whatsoever, the Engineer-in-Charge may, at his sole discretion and with due regard to the event, grant fair and reasonable extension of time not more

than 1/3rd of the total completion period without any financial implication. Such extensions, if admissible, shall be communicated to the contractor by the Engineer-in-Charge in writing within one month of the date of receipt of such request or within one month of the occurrence of the event, but in any case before expiry of the contract period.

CLAUSE – 35: COMPENSATION FOR DELAY

- 35.1 If the contractor fails to complete all items of works in respect of any of the sub- group/group and/or work as a whole as the case may be and before the expiry of the period(s) of completion as stipulated in the aforesaid tender or any extended period (not due to the fault of the contractor) as may be allowed, he shall without prejudice to any other right or remedy of the Authority on account of such default, pay as an ascertained/agreed compensation as per Clause No. 36.
- 35.2 Should however, the contractor achieve the completion of the entire works as a whole under the contract within the time or in the extended time (not due to reasons of default on the part of the contractor) as may be accorded, the Authority will refund to him the amount of compensation recovered from him, if any, in respect of delay in the non completion of works(s) under the individual group/sub-group, as aforesaid in full, In this regard, the decision of the Engineer-in-Charge shall be final and binding.
- 35.3 The amount of compensation may be adjusted, withheld, deducted or set off against any sum due or payable to the contractor under this or any other contract with the Authority

CLAUSE – 36: LIQUIDATED DAMAGES

- 36.1 If the contractor fails to complete all items of works within the period(s) of completion as stipulated in the aforesaid tender or any extended period (not due to the fault of the contractor) as may be agreed he shall without prejudice to any other right or remedy of the Authority on account of such default, pay compensation (not by way of penalty) at the rate of $\frac{1}{2}$ % (half percent) per week on the total value of the contract subject to a maximum of 10% of the total value of the contract.
- 36.2 Should however, the contractor achieve the completion of the entire works as a whole under the contract within the time or in the extended time (not due to reasons of default on the part of the contractor) as may be accorded, the Authority will refund to him the amount of compensation recovered from him, if any, in respect of delay in the non completion of works(s) under the individual group/sub-group, as aforesaid in full, In this regard, the decision of the Engineer-in-Charge shall be final and binding.

- 36.3 The amount of compensation may be adjusted, withheld, deducted or set off against any sum due or payable to the contractor under this or any other contract with the Authority
- 36.4 All sums payable by way of compensation under any of the conditions will be considered as reasonable compensation without reference to the actual loss or damage which will have been sustained.
- 36.5 Payment of such damages shall not relieve the contractor of his obligation to complete the work or from any other of his obligation or liabilities under the contract.

CLAUSE – 37: INSPECTION AND APPROVAL

- 37.1 All works involving more than one process shall be subject to examination and approval at each stage thereof and the contractor shall give due notice to the Engineer-in-Charge on his authorized representative, when each stage is ready. In default of such notice, the Engineer-in-Charge shall be entitled to appraise the quality and extent thereof and the decision of the Engineer-in-Charge in this regard shall be final and binding.
- 37.2 No work shall be put out of view without the approval of the Engineer-in-Charge or his authorized representative and the Contractor shall afford full opportunity for examination. The contractor shall give due notice to the Engineer-in-Charge or his authorized representative whenever any such work is ready for examination and the Engineer- in-Charge or his representative shall, without unreasonable delay, unless he consider it necessary and advise the contractor accordingly , examine and measure such work. In the event of the failure or the contractor to give such notice, he shall if required by the Engineer-in-Charge, uncover such work at the contractor's expenses.
- 37.3 The Engineer-in-Charge or his representative shall have powers at any time to inspect and examine any part of the works and the contractor shall give such facilities as may be required for such inspection and examination.

CLAUSE – 38: COMPLETION CERTIFICATE

- 38.1 The work shall be completed to the entire satisfaction of the Engineer-in-Charge and with in the specified time limit and terms and conditions mentioned in clause 12, 13. As soon as the work under the contractor is completed as a whole the contractor shall give notice of such completion to the Engineer-in-Charge. The Engineer-in-Charge shall inspect the work and shall satisfy himself that the work(s) has been completed in accordance with the provisions of the contract and then issue to the Contractor a certificate of completion indicating the date of completion. Should the Engineer- in-Charge notice that there are defects in the works or the works are not considered to be complete, he shall issue a notice in writing to the Contractor to rectify / replace the defective work or any part thereof or complete the work, as the case may be within such time as may be notified and after the contractor has

complied with as aforesaid and gives notice of completion the Engineer-in-Charge shall inspect the work and issue the completion certificate in the same manner as aforesaid.

- 38.2 No certificate of completion shall be issued as stipulated above and no work be considered to be completed unless the contractor shall have removed from the work site and / or premises all his belongings / temporary arrangements brought / made by him for the site and / or premises in all respects and made the whole of the site and / or premises fit for immediate occupation / use to the satisfaction of the Engineer- in-Charge. If the contractor fails to comply with the above mentioned requirements on or before the date of completion of the work, the Engineer-in-Charge, may as he thinks fit and at the risk at cost of the contractor, fulfill such requirements and remove / dispose of the contractor's belongings / temporary arrangements , as aforesaid, and the contractor shall have no claim in this respect except for any sum realised by the sale of Contractor's belongings / temporary arrangements less the cost of fulfilling the said requirements and any other amount that may be due from the contractor. Should the expenditure on the aforesaid account exceed the amount realised by sale of such contractor's belongings / temporary arrangements then the contractor shall on demand pay the amount of such excess expenditure.

CLAUSE -39: DEFECTS LIABILITY PERIOD

The contractor shall not be responsible for any defect that may develop after acceptance of work order as awarded by EIC.

CLAUSE - 40: MEASUREMENTS

- 40.1 The Engineer-in-charge shall expect as otherwise stated ascertain and determine by measurement the value of work done in accordance with the contract. The daily log book signed by the representatives of the contractor and IWAI shall form the basis for all such measurements.
- 40.2 Notwithstanding any provision in the relevant standard method of measurement or any general or local custom, measurement of work done under the contract shall be taken in accordance with the procedure set forth in the Technical Specifications or Schedule of Quantities under the contract. In case of items of work which are not covered by the Technical Specifications or Schedule of Quantities measurement shall be taken in accordance with the relevant standard methods of measurement laid down by the Bureau of Indian Standard.
- 40.3 All items having a financial value shall be entered in daily log book/ measurement book prescribed by the Authority so that the complete work performed under the contract is duly accounted.
- 40.4 Measurement shall be taken jointly by the Engineer-in-Charge or his authorised representative and by the contractor or his authorised representative.

- 40.5 Before taking measurements of any works, the Engineer-in-Charge or representative deputed by him for the purpose, shall give a reasonable notice to the Contractor. If the Contractor fails to attend or send an authorised representative for measurement after such notice or fails to countersign or to record the objection within a week from the date of taking the measurements, taken by the Engineer-in-Charge shall be taken to be correct and final measurements of such works.
- 40.6 The contractor shall, without extra charge, provide assistance with every appliance, labour and other things necessary for measurement.
- 40.7 Measurements shall be signed and dated by both parties each day on the Site on completion of measurement. If the contractor objects to any of the measurement recorded by the representative of the Engineer-in-Charge a note to the effect shall be made in the item objected to and such note shall be signed and dated by both parties engaged in taking the measurement. The decision of the Engineer-in-Charge on any such dispute or difference or interpretation shall be final and binding on the contractor in respect of all contract items, substituted items, extra items and deviations.

CLAUSE – 41: PAYMENT ON ACCOUNT

- 41.1 Interim bills shall be submitted by the contractor monthly on or before the date fixed by the Engineer-in-Charge for the items of work completed. The Engineer-in-Charge shall then arrange to have the bills verified with reference to the measurements recorded in the measurement book(s).
- 41.2 Payment on account for amount admissible shall be made by the Engineer-in-Charge certifying the sum to which the contractor is considered entitled by way of interim payment for the work executed, after deducting there from the amount already paid, the security deposit and such other amounts as may be withheld, deductible or recoverable in terms of the contract.
- 41.3 Payment of the contractor's bills shall be made by the Authority only in Indian Rupees within 30 days from the date of submission of the bill subject to the acceptance of the Engineer-in-Charge.
- 41.4 Payments due to the contractor shall be made by crossed cheque by the Engineer-in-Charge or his authorised representative. Such cheque shall be issued direct to the contractor on furnishing a stamped receipt for the amount of the cheque or to his constituted attorney duly authorised to receive such payments from the EIC.
- 41.5 Any interim certificate given relating to work done or materials delivered may be modified or corrected by any subsequent interim certificate or by the final certificate. No certificate(s) of the Engineer-in-Charge supporting an interim

payment shall itself be conclusive evidence that any work or materials to which it relates is / are in accordance with the same.

- 41.6 Should there be a request for extension of date of completion, pending its consideration interim payments shall continue to be made as provided herein.
- 41.7 TDS at the applicable rates shall be deducted at source from any payment made to the contractor against this contract.

CLAUSE – 42: TAXES, DUTIES AND LEVIES ETC.

All existing sales tax or any other tax or duty or levy such as octroi, Dhorat, royalty, terminal tax etc on all materials, including steel, wood, POL (and increase if any, on these during the currency of the contract) that the contractor has to purchase for the performance of the contract, shall be payable by the contractor and the Authority will not entertain any claim for compensation whatsoever in this regard. The rates quoted by the contractor shall be deemed to be inclusive of all such taxes, duties, levies, etc.

CLAUSE – 43: PAYMENT OF FINAL BILL

The final bill shall be submitted by the contractor within one month from the date of completion of the work or of the date the certificate of completion furnished by the Engineer-in-Charge. No further claim in this regard unless as specified herein under shall be entertained. Payment shall be made within three months. If there shall be any dispute about any item or items of the work then the undisputed item or items only shall be paid within the said period of three months or six months, as the case may be. The contractor shall submit a list of the disputed items within thirty days from the disallowance thereof and if he fails to do so, his claim shall be deemed to have been fully waived and absolutely extinguished.

CLAUSE - 44: OVER PAYMENTS AND UNDER PAYMENTS

- 44.1 Whenever any claim whatsoever for the payments of a sum of money to the Authority arises out of or under this contract against the contractor, the same may be deducted by the Authority from any sum then due or which at anytime thereafter may become due to the contractor under this contract and failing that under any other contract with the Authority or from any other sum whatsoever due to the contractor from the Authority or from the Authority or from his security deposit, or he shall pay the claim on demand.
- 44.2 The Authority reserves the right to carry out post- payment audit and technical examination of the final bill including all supporting vouchers, abstracts, etc. The authority further reserves the right to enforce recovery of any over payment when detected notwithstanding the fact that the amount of the final bill may be included by one of the parties as an item of dispute before an

arbitrator appointed under clause 48 of this contract and notwithstanding the fact that the amount of the final bill figures in the arbitration award.

- 44.3 If as a result of such audit and technical examination any over payment is discovered in respect of any work done by the contractor or alleged to have been done by him under contract, it shall be recovered by the Authority from the contractor by any of all of the methods prescribed above, and if any under payment is discovered, the amount shall be duly paid to the contractor by the Authority.
- 44.4 Provided that the aforesaid right of the Authority to adjust over-payment against amount due to the contractor under any other contract with the Authority shall not extend beyond the period of two years from the date of payment of the final bill or in case the final bill is a MINUS bill, from the date the amount payable by the Contractor under the MINUS final bill is communicated to the contractor.
- 44.5 Any sum of money due and payable to the Contractor (including the security deposit returnable to him) under the contract may be withheld or retained by way of lien by the Engineer-in-Charge or Authority against any claim of the Authority or such other person or persons in respect of payment of a sum of money arising out of or under any other contract made by the contractor with the Engineer-in-Charge or Authority or with such other person or persons. The sum of money so withheld or retained under this clause by the Engineer-in-Charge or Authority will be kept withheld or retained as such by the Engineer-in-Charge or Authority or till his claim arising out of in the same contract or any other contract is either mutually settled or determined by the arbitrator, if the contract is governed by the arbitration clause under the clause 48 or by the competent court hereinafter provided, as the case may be, and the contractor shall have no claim for interest or damages whatsoever on this account or any other ground in respect of any sum of money withheld or retained under this clause.

CLAUSE - 45: CONTRACT MATTERS TO BE TREATED AS CONFIDENTIAL

- 45.1 The contractor shall consider all documents, correspondence, decisions and orders concerning the contract as confidential and/ or restricted in nature and he shall not divulge or allow access to them by any un-authorized person.
- 45.2 The contractor shall take necessary steps to ensure that all persons employed on any work in connection with this contract have noted that the Indian Official Secrets Act, 1923 (XIX of 1923) applies to them and shall continue so to apply even after the execution of such under the contract.

CLAUSE- 46: FINALITY CLAUSE

It shall be accepted as an inseparable part of the contract that in matters regarding materials, workmanship, removal of improper work, interpretation of the contract drawings and contract specifications, mode of procedure and

the carryout out the work the decision of the Engineer in-Charge which shall be given in writing shall be final and binding on the contractor.

CLAUSE – 47: SUM PAYABLE BY WAY OF COMPENSATION TO BE CONSIDERED IS REASONABLE WITHOUT PREFERENCE TO ACTUAL LOSS

All sum payable by way of compensation to the Authority under any of these conditions shall be considered as reasonable compensation without reference to the actual loss or damage sustained and whether or not damage shall have been sustained.

CLAUSE – 48: ARBITRATION

48.1 Except as otherwise provided herein before, all questions, disputes or difference in respect of which the decision has not been final and conclusive arising between the Contractor and the Authority in relating to or in connection with contract shall be referred for arbitration in the manner provided as under and to the sole arbitrator appointed as follows:

- (i) Either of the parties may give to the other notices in writing of the existence of such question dispute or difference.
- (ii) Within thirty (30) days of receipt of such notice from either party the engineer-in-charge of work at the time of such dispute shall send to the Contractor panel of three persons and there after the Contractor within fifteen (15) days of receipt of such panel communicate to the Engineer-in-charge the name of one of the persons from such panel and such a person shall then be appointed as sole arbitrator by the Chairman, IWAI. However, the arbitration so appointed shall not be an officer or the employee of Inland Waterways Authority of India.
- (iii) Provided that if the Contractor fails to communicate the selection of a name out of the panel so forwarded to him by the Engineer-in-charge then after the expiry of the aforesaid stipulated period the Chairman, shall without delay select one person from the aforesaid panel and appoint him as the sole arbitrator.

48.2 The arbitrator to whom the matter is originally referred being transferred or vacating his office or being unable to act for any reason, then the Chief Engineer shall appoint another person to act as sole arbitrator, such person shall be entitled to proceed with the reference from the stage at which it was left by the predecessor.

48.3 The award of the Arbitrator shall be final and binding. The Arbitrator shall decide in what proportion the Arbitrator's fees, as well as the cost of Arbitration proceeding shall be borne by either party.

48.4 The Arbitrator with the consent of the parties can enlarge the time, from, time-to-time to make and publish his award.

- 48.5 A notice of the existence in question, dispute or difference in connection with the contract unless served by either party within 30 days of the expiry of the defects liability period, failing which all rights and claim under this contract shall be deemed to have been waived and thus forfeited and absolutely barred.
- 48.6 The Arbitrator shall give reasons for the award if the amount of claim in dispute is Rs. 75,000/- and above.
- 48.7 The work under this Contract shall continue during Arbitration proceedings and no payments due from or payment by the Authority shall be withheld on account of such proceedings except to the extent which may be in dispute.
- 48.8 The Arbitration and Conciliation Act 1996 with any statutory modifications or re-enactment thereof and the rules made there under and being in force shall apply to the Arbitration proceedings under this clause.

NOTE: In case of contract with another Public Sector Undertaking, the 21.1 to 21.8 clause shall stand deleted and the following Arbitration Clause shall apply: "Except as otherwise provided, in case of a contract with a public Sector Undertaking if at any time any question dispute or difference whatsoever arises between the parties upon or in relation to, or in connection with this agreement, the same shall be settled in terms of the Ministry of Industry, Department of Public Enterprises O.M No. 3/5/93-PMA dt.30.06.93 or any modifications / amendments thereof." The arbitrator shall have the power to enlarge the term to rate the award with the consent of the parties provided always that the commencement or continuation of the arbitration proceeding shall not result in cessation or suspension of any of other rights and obligations of the parties of any payments due to them hereunder.

- 48.9 The venue of the arbitration proceeding shall be at Noida / New Delhi. It is further to clarify that both parties to this agreement hereby undertake not to have recourse to Civil Court to settle any of their disputes whatsoever arising out of this agreement except through arbitration.

PART- III

TECHNICAL SPECIFICATIONS & SPECIAL CONDITIONS

1. The contractor shall forthwith dispatch raise and remove any plant (floating or otherwise) belonging to him or to any person employed by him which may sunk in the course of execution and completion of the works or otherwise deal with the same as per E.I.C. or the representative may direct. Until the same shall be raise and removed the contractor shall display at night such lights and do all such things for the safety of navigation as may be required by the department. In the event of the contractor not carrying out the obligation imposed upon him by this clause, the Engineer-in-charge shall raise and remove the same (without prejudice to the right of the Authority to hold the contractor liable) and the contractor shall pay to the Authority all costs incurred in connection therewith. The fact that broken vessel, craft or plant is insured or has been declared a total loss, shall not absolve the contractor from his obligation under this to raise and remove the same.

2. **REPAIRING AND TESTING OF THE VESSEL.**

Subject to and in accordance with the provisions of the contract, the contractor shall and in the best and most workmen like manner repair, equip and test the vessel to the satisfaction of the Engineer-in-charge or his representative. The vessel should be handed over to the Authority at the same place where the vessel was taken over for repair.

3. **REPLACEMENT OF DEFECTIVE WORK, MATERIALS AND FITTINGS**

All materials used in carrying out his contract shall confirm to the concerned standards and shall be to the entire satisfaction to the Engineer-in-charge or his representative. Any portion or portions of the materials, machinery or any of the works done under his contract which may be considered by the EIC or his representative to be defective or unsatisfactory or not in accordance with the specifications and plants and the requirements of the vessel shall be replace in a manner satisfactory of E.I.C. or his representative at the expenses of the contractor.

4. **CONTRACTOR'S RESPONSIBILITY DURING THE REPAIR**

The said repair and overhauling of the vessels shall be attended as required and the contractor shall pay & discharge all costs and liabilities thereof and connected therewith and shall continue to be responsible for the safety of vessel until E.I.C. or his representative takes delivery of the vessel. If any loss(whether total or otherwise) shall be sustained and incurred by the vessel by any means or from any cause during the repair / overhauling the contractor shall at his own expense make good such loss to themselves satisfaction of the Engineer-in-charge.

5. **MATERIAL AND WORKMANSHIP**

All plates and sections uses for ship repair will conform JS 3026 or 226 as quality. All timber will be of best quality seasoned wood acceptable to the Engineer-in-charge and free from sap rots and knots and latest IS code should be followed in all such cases.

All welding should be electric ark welding method by skilled welders and shall be approved by the Engineer-in-charge and shall conform to the latest relevant IS code on welding.

6. **PAINTING PROTECTION**

Surface preparation: All steel surfaces, angles and plates shall be wire brushed and approved primer to be applied as specified. The vessel shall be painted with marine quality paint as specified on dry surface.

7. All measurement shall be done as per the standard code of practice or as directed by the Engineer-in-charge or his representative.

8. **Replaced old parts / equipment and scrap:**

In case of replacement of steel metal sheets, spare parts ,renewal of machinery, equipment etc, all the replaced old parts / equipment / machineries, unserviceable items etc are to be handed over to Authority except old steel plates. The cost of old steel plates shall be deducted from final bill as shall be finalized the qty./ cost by the departmental committee. The contractor shall keep an inventory of such materials indicating the size and approximate weight duly certified by the Engineers In Charge or his representative and shall hand over the materials to the Authority during the time of handing over the vessel. The final bill of the contractor must accompany the duly certified inventory of, all the replaced old parts / equipment / machineries, unserviceable items

9. The contractor has to arrange himself

a) The site of repair / overhaul.

b) Power supply.

c) Water and other requirements at his own cost to carry out the repair work.

10. The Authority will arrange to deliver the vessel at the contractor's yard.

11. **SURVEY**

The necessary statutory survey as required shall be arranged by the contractor on behalf of the Authority after approval of competent authority and survey fees as claimed by the IWT surveyor (under state Govt.) will only reimbursed by Authority.

The survey of the vessel by the surveyor has to be conducted along with EIC or his representative, hence contractor shall inform in advance regarding the surveyor's inspection / survey. On completion of the survey, joint inspection report signed by the contractor, surveyor or EIC shall be made immediately along with the list of extra job to be undertaken, as per the recommendation of surveyor. Delay in completion of repair work to arranging the survey will not be considered under 'Force Measure' and no extra time will be allowed on this account.

12. **APPROVAL TO THE ADDITIONAL WORK**

The list of additional work which are considered necessary as per recommendation of the surveyor/ EIC, and / or those which are directed during the course of repair for satisfactory completion of repairs and subsequent commissioning of vessel, should be prepared jointly by EIC and contractor. Thereafter the contractor shall furnish quotation for those items of works for which rate would be derived from the agreement or afresh as the case may be in force along with extra time required for completion of all additional work. The rate for the additional work shall be approved as provided in clause no. 14 of General Condition of agreement for execution.

13. In case of vessel is not delivered within the specified time, No further Dock hire charge / mooring charges will be paid for contractual items.

14. The contractor shall for the period of six months from the date of handing over of the vessel after repairs & trials, guarantee for all the items that are attended / supplied / repaired by the contractor or sub contractor on the vessel, against all defects which are due to defective material or /and workmanship. Guarantee period shall be extended by the no. of days the vessel remains in operational due to the defects occurred during the guarantee and are to be rectified by the contractor. Contractor shall attend such defects at place (site) wherever the vessel is with in a reasonable period on receipt of the notice. If such repairs are not attended to specify above and the vessel is to be kept idle, Authority may levy penalty @ Rs.100/- per day, which will be recovered from security deposit.

15. **INSPECTION OF WORKS:**

In addition to the provision contained in the clause-33 of general condition of contract, the Authority may inspect / supervise the work by an employee / by the officer / by the Authority or through third party / agency appointed by the Authority for such purpose.

16. The Authority shall have the right to supply store, spares, materials etc, if required.

17. **MATERIAL & WORKMANSHIP FOR FRP/FRG REPAIR WORK**

The resin and glass fiber used for FRP repair work shall be of approved quality either from MMD / various standard organizations such as BIS or other govt. agencies. These are to be obtained from recognized and approved firms. The chemical composition of the resin and glass fiber shall conform to BIS / other standards. The workmanship of the work shall be approved standard prevailing in such type of work. The work shall be conducted by the experienced and qualified moulders / repairs.

All the material for wood work i.e. timber, plywood, sun mica, laminated ply board shall be of best quality and acceptable to Engineer in-Charge. The timber must be seasoned and free from rap & knot.

18. The infrastructure i.e. cranes, vessels etc. available with IWAI shall be provided to repairer on request and expenditure shall be taken from users on actual as applicable.

AGREEMENT FORMAT

This agreement made on _____ day _____ year _____ between the Inland Waterways Authority of India (hereinafter called the 'IWAI' which expression shall unless excluded by or repugnant, to the context, be deemed to include heir, successors in office) on one part and M/S _____ (hereinafter called the 'CONTRACTOR' which expression, shall unless excluded by repugnant to the context be deemed to include his heirs, executors, Administrators, representatives and assigns of successors in office) on the other part.

WHEREAS THE IWAI desirous of undertaking the works for _____

WHEREAS the contractor has offered to execute and complete such works and whereas IWAI has accepted the tender of the contractor and WHEREAS the contractor has furnished _____ pay _____ order _____ of Rs _____ as security for the due fulfillment for all the conditions of this contract.

NOW IN THIS AGREEMENT WITNESSTH AS FOLLOWS

In this agreement words and expression shall have the same meaning as are respectively as assigned to them in the conditions of contract hereinafter referred to:

The following documents shall be deemed to form and be read and construed as part of this agreement VIZ.

- i) (a) Notice Inviting Tenders

- (b) Tender form

- ii) Information & instruction for Tenders

- iii) Warranty

- iv)
 - (a) Schedule'A' - Bill of Quantity

 - (b) Schedule'B'Annexure

 - (c) Schedule'C' – List of plant including machinery, floating crafts and equipment required & available with the contractor.

- v) General Conditions of Contract

- vi) Technical specifications and Special Conditions of Contract

The contract agreement has been completed by the IWAI from the original tender documents and all the correspondences from the tendering stage till acceptance. In the event of any difference arising from the completion of the contract, the original tender documents, contractor's offer, minutes of meetings and correspondence between the party ended vide letter No. _____ may be referred to by either party. These documents shall take precedence over the compiled documents.

The contractor hereby covenants with the IWAI to complete and maintain the "Works" in conformity in all respect, with the provisions of the agreement.

The IWAI hereby covenants to pay the contractor in consideration of such completion of works, the contract price at the time and in the manner prescribed by the contract.

IN WITNESS WHEREOF the parties hereunto have set their hands and seals on the day year first written.

For and on behalf of

(Inland Waterways Authority of India)

Signature _____

Name & Designation _____

Stamp

Witness:

1) Signature _____

2) Name & Designation _____

For and on behalf of

Contractor

Signature

Name&Designation

Stamp

Witness:

1) Signature _____

2) Name & Designation _____

ANNEXURE - A**BOQ FOR DRY DOCKING REPAIR OF CSD YAMUNA DURING THE YEAR 2011-12**

L – 40M, B – 10M, Depth – 2.30M, GT – 168 .

SL.NO.	DESCRIPTION OF WORK	UNIT	QTY	RATE	AMOUNT
1	Docking & Undocking, dockhire and mooring charges	Compt.	Compt.		
2	Ultrasonic testing is to be done of hull & deck plate as required as per direction of IWT srveyor / EIC.	Spot.	200		
3	Cropping and renewal of under water Hull plates, deck, angles, frames, bracket, etc if required as per direction of IWT Surveyor / EIC	Ton	1		
4	Chipping, scrapping, wirebrushing and proper cleaning of hull & side plate from keel to water level.	Sqm	400		
5	Painting of hull & side plate from keel to water level with one coat of Zinc Chromate primer and two coats of anti crossive paint(Shalimar marine paint) as per direction of IWT Surveyor/ EIC.	Sqm.	400		
6	The entire ship side shell plate from LWL to main deck are to be scrapped, wire brushed and chipped.	Sqm.	120		
7	The entire ship side shell plate from LWL to main deck are to be painted by one coat of Zinc Chromate primer and two coats of existing colour marine paint (Shalimar paint) as per direction of IWT surveyor / EIC	Sqm.	120		
8	All main sea suction valve and sea line valves are to be serviced as per direction of IWT surveyor/EIC.				
(a)	Labour charges	No.	12		
(b)	Cost of spare (actual + 10 % basis if required)	LS			
9	Sea chest, Mud box, Stainer are to be checked, repaired, cleaned and painted as per direction of IWT surveyor/EIC..				
(a)	Labour charges.	No	2		
(b)	Cost of spare (actual + 10 % basis if required)	LS.			
10	The inter cooling system tubes of Main & Aux. engine to be removed, tubes checked, cleaned, scrapped, painted and same to be fitted back after renewal of worn out parts with labour and materials.	No..	2		
11	Entire fresh water tank to be chipped, scrapped, cleaned, and painted by two coats of marine paint(Shalimar paint)as per direction of IWT surveyor/EIC, cap – 4447 Ltrs. – 1 No.	Sqm.	30		
12	Entire spud carrier, spud guide, ramp, cutter lader (inside & outside) cutter suction pipe, main spud door are to be cleaned and painted by two coats of	Sqm.	250		

	existing colour marine paint.				
13	Safety unit of Main Engine CAT Model No. - 3512 is not working, same to be checked including Alam unit, sencer etc and rectified the defects.				
a	Labour charges	No.	1		
b	Cost of spare (actual + 10 % basis if required)	L.s			
14	Injector of Main engine, Make- CAT, Model No 3512 is to be serviced, tested and calibrated.	No.	12		
15	Pneumatic starter motor of main engine is to be serviced.	No.	1		
16	Main engine speed(RPM) control lever/unit is not working from wheel house. The same is to be checked including lever, electrical/electronic unit and rectified the defects.				
a	Labour charges	No.	1		
b	Cost of spare (actual + 10 % basis if required)	L.s			
17	Safety unit of Aux. Engine CAT Model No. - 3412 is not working, same to be checked including Alam unit, sencer etc and rectified the defects.				
a	Labour charges	No.	1		
b	Cost of spare (actual + 10 % basis if required)	L.s			
18	Aux. engine speed(RPM) control lever/unit is not working from wheel house. The same is to be checked including lever, electrical/electronic unit and rectified the defects.				
a	Labour charges	No.	1		
b	Cost of spare (actual + 10 % basis if required)	L.s			
19	Flexible Lub.oil pipe of Aux. engine is to be renewed with nipple	No.	4		
20	Cutter pressure meter-0-250 bar, Spud carrier 0-250 bar, Spud carrier position meter 0-5 mtr, Mixture density-1.2-0-1.2cum, Cutter depth-0 to 8 mtr. vacuum mtr, Descharge mtr. Dredging computer, Hydraulic pressure gauge-0 to 250, winch swing mtr.- 0 to 250 are not working in control room. The entire unit is to be checked including electrical line, sencer etc and rectified the defects.				
a	Labour charges	Com. Job	1		
b	Cost of spare (actual + 10 % basis if required)	L.S			
21	Main Spud & Aux Spud Hydraulic brake is not holding & releasing properly, The same is to be checked and rectified the defects.				
a	Labour charges	Com. Job	1		
b	Cost of spare (actual + 10 % basis if required)	L.s			

22	Pneumatic clutch of Dredge pump is not engaging through switch of wheel house & engine room. The same is to be checked including electrical/electronic unit and rectified the defects.				
a	Labour charges	No.	1		
b	Cost of spare (actual + 10 % basis if required)	L.s			
23	The cutter is rotating automatically(10 -13 rpm). The same is to be checked including hydraulic/electronic unit and rectified the defects.				
a	Labour charges	No.	1		
b	Cost of spare (actual + 10 % basis if required)	L.s			
24	Cutter is not rotating required speed i.e. 25 - 30rpm.after engaging the control lever. The entire unit hydraulic/electronic & control lever are to be checked and rectified the defects.				
a	Labour charges	No.	1		
b	Cost of spare (actual + 10 % basis if required)	L.s			
25	Dredge profile computer is not working. The dredging computer section i. e. cutter swing indication lamp (pre & post warning),centreline etc is not indicating. All system to be checked and make operational.				
a	Labour charges	No.	1		
b	Cost of spare (actual + 10 % basis if required)	L.s			
26	Anchor & Ladder winch break shoes are damaged, The same is to be renewed with brass pignuted materials with labour and materials (size thick – 12 mm, Breadh – 4", L – 7.5')	No.	3		
27	Talk back unit is not working. The entire system is to be checked including amplifire unit,5nos speaker,microphone etc. and rectified the defects including labour and spares.	No.	1		
28	Fabrication of Hydrofore fresh water tank as per sample cap. – 30 lts. With materials and labour chages.	No	1		
29	Fire pump is to be serviced				
a	Labour charges	No.	1		
b	Cost of spare (actual + 10 % basis if required)	L.s			
30	Hydrofore pump is to be repaired including labour and materials/spares	No.	1		
31	Flushing pump is to be repaired.				
a	Labour charges	No.	1		
b	Cost of spare (actual + 10 % basis if required)	L.s			
32	Air bottel(30Kgs) is to be cleaned and tested, valve to be serviced and leakage of air to be arrested in air line (make – ODS, SI No. ZU123/26, working air – 350 Ltrs.				

a	Labour Charges	No.	2		
b	Cost of spare (actual + 10 % basis if required)	LS.			
33	Compressure engine Auto switch (30 bar cut & 20 bar start) is not working .The same is to be renewed with labour and materials	No	1		
34	Safety unit of Harbour engine USA cummins make model – 4BT, 70 HP is not working. The same is to be checked and calibrated with auto shutdown/rectified the defects.	No.	1		
35	24 volt Alternator(Dynmo) of harbour engine is to be repaired including labour and all materials/spares.	No.	1		
36	Clutch unit of Fire pump driven by harbour engine is not working. The same unit is to be opened, repaired and refitted after renewal of worn out parts	No.	1		
37	51KVA,415V Harbour Alternator is to be dismantalled,opened,serviced, varnished and refitted after taking insulation measurement & renewal of worn out parts as per direction of IWT surveyor/EIC	No.	1		
38	Blower air filter is to be renewed(Size-64cm x 64cm) as per sample.	No.	28		
39	Anchor swing pulley is to be dismantalled , opened, clearness to be checked and if required bush and pin to be build up, repaired and same to be refitted.				
a	Labour charges	No	2		
b	Cost of spare (actual + 10 % basis if required)	LS			
40	450mm dia.rubber hose pipe of suction line of dredge pump is damaged. The same pipe is to be opened and new pipe to be fitted in original position including nut,bolts & washers. Hose pipe will be supplied by IWAI.	No.	1		
41	Hydraulic oil is leaking in both spud lifting ramp, The same is to be arrested	Job	1		
42	Hydraulic oil filter is to be opened, cleaned and refitted.	No.	2		
43	All HSD reserve tanks is to be cleaned. Cap.- 24512 Lts. & 17785 Ltrs.	No.	4		
44	HSD service tank is to be cleaned. Cap.-2500 Lts	No.	1		
45	Hydraulic oil tank is to be cleaned. Cap.-2500 Lts	No.	1		
46	All Grease line(distribution pipe) is to be checked & properly cleaned for smooth injecting of grease.	Job	1		
47	FRP sheet of owning structure is damaged. The damaged sheet is to be renewed(size of sheet-3M x 1M X2.5mm).	No.	11		
48	Fire extinguisher is to be serviced and refilled.				
a	Foam type – 9 ltrs.	No	6		

b	DCP – 5 ltrs.	No	3		
c	Water CO2 – 9ltrs.	No.	2		
49	Deck plate, Wheel house, crane, bollard super structure etc to be cleaned and painted by two coat paint existing colour marine paint	Sqm.	600		
50	Disc valve of Quince make compressure is defective. The same is to be checked and repaired / renewed.Compressure.Model No. -325 LHP, Sl.No. 20080417-0107.	No.	1		
51	Fire hydrant valve is to be serviced	.			
a	Labour charge	No.	2		
b	Cost of spare (actual + 10 % basis if required)	LS			
52	All Blige is to be cleaned	Job	1		
53	Supply of fire hose dia-2.5",L-30Mtr	No.	2		
	Total Amount				

ANNEXURE - B**BOQ for Dry Docking repair of HSD Sone during the year 2011-12*****L-27.50 M, Width-10M, Draft - 1.20 M, G.Tone-185Tons.***

Sl. No	Description of Work	Unit	Qty.	Rate	Amount
1	Docking & Undocking, dockhire and mooring charges	Compt.	Compt.		
2	Ultrasonic testing is to be done of hull & deck plate as required as per direction of IWT srveyor / EIC.	Spot.	200		
3	Cropping and renewal of under water Hull plates, deck, angles, frames, bracket, etc if required as per direction of IWT Surveyor / EIC	Ton	2		
4	Chipping, scrapping, wirebrushing and proper cleaning of hull & side plate from keel to water level.	SqM	400		
5	Painting of hull & side plate from keel to water level with one coat of Zinc Chromate primer and two coats of anti crossive paint(Shalimar marine paint) as per direction of IWT Surveyor/ EIC.	SqM	400		
6	The entire ship side shell plate from LWL to main deck are to be scrapped, wire brushed and chipped.	Sqm.	150		
7	The entire ship side shell plate from LWL to main deck are to be painted by one coat of Zinc Chromate primer and two coats of existing colour marine paint (Shalimar paint) as per direction of IWT surveyor / EIC	Sqm.	150		
8	All main sea suction valve and sea line valves are to be serviced as per direction of IWT surveyor/EIC.				
a	Labour charges	No.	4		
b	Cost of spare (Actual + 10 % basis as required)	LS			
9	Sea chest, Mud box, Stainer are to be checked, repaired, cleaned and painted as per direction of IWT surveyor/EIC..				
a	Labour charges.	No	2		
b	Cost of spare (Actual + 10 % basis as required)	LS.			
10	STBD side propller steening system and rudder indicator is not working. The same is to be checked including hydraulic line, valve, PCB, rudder sencer and rectified the defects				
a	Labour charges	No.	1		
b	Cost of spare (Actual + 10 % basis as required)	L.s			

11	Fresh Water reserve tank cap-16000lts. Is to be cleaned and cemented with labours & materials	No.	1		
12	Air bottle is to be serviced ,tested & valve to be over hauled.				
a	Labour charges	No.	1		
b	Cost of spare (Actual + 10 % basis as required)	L.s			
13	Dredge pump sea chest stainer to be checked and two no. new valve to be fitted.				
a	Labour charges	No.	2		
b	Cost of spare (Actual + 10 % basis as required)	L.s			
14	Fire extingusher is to be serviced,tested(Hydraulic) and refilled.				
a	Foam type – 9 ltrs.	No	4		
b	DCP – 5 ltrs.	No	3		
c	Water CO2 – 9ltrs.	No.	3		
15	Deck plate, Wheel house, bollard, super structure,hatch etc are to be cleaned and painted by two coats paint of existing colour marine paint(Shalimar)	Sqm.	500		
16	Ford HRP complete assembly to be opened cleaned, repaired and fitted back after renewed of worn out parts.				
a	Labour charges	No.	1		
b	Cost of spare (Actual + 10 % basis as required)	L.s			
c	Maching charges if required (Actual+10 %)	L.s			
17	Godrej make 300 lts fridge to be serviced				
a	Labour charges	No.	2		
b	Cost of spare (Actual + 10 % basis as required)	L.s			
18	Search light is not working. The elctrical line, holder,switch are to be checked and rectified the defects including labour and materials.	No.	1		
19	DC horn is to be checked and if required same is to be repaired/Renewed				
a	Labour charges	No.	1		
b	Cost of spare (Actual + 10 % basis as required)				
20	1.5 Ton window Air conditioner is to be serviced.				
a	Labour charges	No.	2		
b	Cost of spare (Actual + 10%)				
21	Anchor veering & hauling to be made Motor gear system after obtaining approval of surveyor.	No.	2		

22	Anchor is not holding properly. The Anchor is to be checked and if required the modification is to be done as per direction of IWT Surveyor / EIC	No.	2		
23	Base of Toilet comod is damaged. The comode is to be opened,base to be renewed and refitted. Leakage of water is also arrested including labour and materials	Job	1		
24	Tap of Bath room & kitchen is to be renewed	No.	4		
25	Kitchen and bathroom to be cleaned and painted by 2 coats of existing colour paint	sqm	90		
26	Toilet flushing valve to be renewed				
a	Labour charges	No.	2		
b	Cost of spare (Actual + 10 % basis as required)	L.s			
27	Stbd side Gen.set engine,Make - Simson,HP-57 is to be complete overhauled.				
a	Labour charges	No.	1		
b	Cost of spare (Actual + 10 % basis as required)				
c	Maching charges if required (Actual+10 %)				
28	Port side Gen. set engine, Make-Simson, HP-57 is to be serviced including testing and calibration of injector and fuel pump.				
a	Labour charges	No.	1		
b	Cost of spare (Actual + 10 % basis as required)				
29	Checking / repairing / servicing (if required replacement of worn out parts) of entire electrical lines / electronic lines (AC / DC) distribution line, pannel board, PCB, connected with hydraulic lines / pneumatic lines, switch & holders, tube light, nav.				
a	Labour charges	Comp Job	1		
b	Cost of spare (Actual + 10 % basis as required)	LS			
30	Electrical fan is to be serviced				
a	Labour charges	No.	6		
b	Cost of spare (Actual + 10 % basis as required)				
31	Kitchen and bathroom exhaust fan to be serviced				
a	Labour charges	No.	2		
b	Cost of spare (Actual + 10 % basis as required)	L.s			
32	Fire bydrant valve is to be serviced.				
a	Labour charges	No.	4		

b	Cost of spare (Actual + 10 % basis as required)	L.s			
33	Window rubber packing is to be renewed	No.	2		
34	Hydraulic winch of water injection jet is not working. The hydraulic line, electrical/electronic unit, winch motor is to be checked and rectified the defects.				
a	Labour charges	No.	1		
b	Cost of spare (Actual + 10 % basis as required)	L.s			
	Total Rs.				

ANNEXURE - C**BOQ for Dry Dock repair of CSD JALANGI during the year 2011-12****L- 40.3 M, B - 7.0 M, Depth - 2.46 M, Draft - 1.2 M, GRT - 108 .**

SL.NO	DESCRIPTION OF WORK	UNIT	QTY	RATE	AMOUNT
1	Docking & Undocking, dockhire and mooring charges	Compt.	Compt.		
2	Ultrasonic testing of under water hull plate & deck plate	Spot	150		
3	Cropping and renewal of MS plate of hull, Deck, frame, angle which ever detected defective / less than premissible thickness if required as per direction of IWT surveyor/EIC	Ton.	1		
4	Chipping, scrapping wire brushing & cleaning of under water hull plates from keel to LWL	Sqm	350		
5	Painting of hull & side plate from keel to water level with one coat of Zinc Chromate primer and two coats of anti crossive paint(Shalimar marine paint) as per direction of IWT Surveyor/ EIC.	Sqm	350		
6	The entire ship side shell plate from LWL to main deck are to be scrapped, wire brushed and chipped.	Sqm	110		
7	The entire ship side shell plate from LWL to main deck are to be painted by one coat of Zinc Chromate primer and two coats of existing colour marine paint (Shalimar paint) as per direction of IWT surveyor / EIC	Sqm	110		
8	Both spud are not holding the dredger during dredging operation.The same is to be checked & rectified the defects including its assoseries as per directive of IWT Surveyor & EIC.				
a)	Labour charges	No	2		
b)	Cost of spare (Actual + 10 % basis as required)	LS			
9	Deck water pump and engine is to be serviced				
a)	Labour charges	No.	1		
b)	Cost of spare (Actual + 10 % basis as required)	LS			
10	Checking / Servicing / repairing of under water all lines & all valves & other fitted valves.				
a)	Labour charges	Job	1		
b)	Cost of spare (Actual + 10 % basis as required)	No.			
11	Emergency Hydraulic pump Is not working. Motor, Pump, starter including Hy. Pipe lines etc are to be checked and rectified the defects.				
a)	Labour charge	No	1		

b)	Cost of spare (Actual + 10 % basis as required)	LS			
12	Aux engine CAT - 3306 sea water pump & fresh water are to be serviced				
a)	Labour charge	No	2		
b)	Cost of spare (Actual + 10 % basis as required)	LS			
13	Main Engine water flushing pump is to be serviced				
a)	Labour charge	No	1		
b)	Cost of spare (Actual + 10 % basis as required)	LS			
14	Side railing are damaged,The damaged railing is to be straightened and welded.	Comp Job	1		
15	Deck, deck fitment & Engine room to be chipped, wire brushed cleaned and painted by 2 coats of existing colour marine quality paint including pipe lines.	Sqm	900		
16	Hudraulic pipe of spud is setting by wooden block,nut bolt is to be renewed.	No	12		
17	Bath room water supply line & other line water supply is damaged same to renewed and all fitment assoseries provided				
a)	Labour charge	No	1		
b)	Cost of spare (Actual + 10 % basis as required)	LS			
18	Air compressor & motor are to be serviced and leaking of air from air bolltle & line is to be arrested as per norms.				
a)	Labour charges	Comp Job	1		
b)	Cost of spare (Actual + 10 % basis as required)	LS			
19	Entire Hydraulic line to be checked & Hy. Oil leaking from several joint same to be arrested including labour & material.	Comp Job	1		
20	Sea chest, Mud box, stainer to be checked, repaired, cleaned and painted.	Comp Job	1		
21	dredged quantity Discharge nozzle is to be repaired/renewed	No	1		
22	Cutter teeth is to be build up & S.S.bur fitted	Comp Job	1		
23	'T' hook fitting is to be made and fitted for fender.	No	20		
24	The inter cooling system tubes(cooler) of Main & Aux. engine to be removed, tubes checked, cleaned, scrapped, painted and same to be fitted back after renewal of worn out parts with labour and materials.	NO	1		
25	Both spud lifting ramp safety rubber guard is damaged .The same is to be renewed.	No	1		

26	Toilet comode is broken. The same is to be removed and new comode is to be fitted and flushing valve is to be repaired including labour and materials	No	1		
27	500 ltr sinthek water tank is to be renewed.	No	1		
28	Exhaust fan of toilet is to be repaired including labour and materials.	No	1		
29	Supply of 30 Watt, Make-Ahuja microphone unit with 2 speaker & one MIC.and to be fitted.	No	1		
30	Port side Gen. engine make cummins, model no. 53GF4, HP-52 to be serviced including electrical lines/ measuring guage/sensors				
a)	Labour charge	No	1		
b)	Cost of Spare (Actual + 10 % basis)	LS			
31	FRP sheet of owning structure is damaged. The damaged sheet is to be renewed(size of sheet- 3M x 1M X2.5mm).	No.	10		
32	Anchor & Ladder winch break shoes are damaged, The same is to be renewed with brass pignuttet materials with labour and meterials (size thick – 12 mm, Breadh – 4", L – 7.5')	No.	3		
33	Spud carriage distance meter is not working, The same is to be checked and rectified the defects.				
a)	Labour charges	No	1		
b)	Cost of spare (Actual + 10 % basis as required)	LS			
34	All display parameter of Main engine is not indicating in wheel house. The entire unit is to be checked and rectified the defects.				
a)	Labour charges	Comp Job	1		
b)	Cost of spare (Actual + 10 % basis as required)	LS			
35	Fire extinguisher is to be serviced, tested and refilled .				
a)	Foam type - 9 lts	No	2		
b)	DGP - 5 kg	No	2		
Total Rs.					

ANNEXURE - D**BOQ for Dry Dock Repair of CSD ID-IV during the year 2011- 12**

SL. NO.	Description of Work	Unit	Qty.	Rate	Amount
1	Docking & Undocking, dockhire and mooring charges	Compt.	Compt.		
2	Ultrasonic testing is to be done of hull & deck plate as required as per direction of IWT srveyor / EIC.	Spot.	200		
3	Cropping and renewal of under water Hull plates, deck, angles, frames, bracket, etc if required as per direction of IWT Surveyor / EIC	Ton	5		
4	Chipping, scrapping,wirebrushing and proper cleaning of hull & side plate from keel to main deck.	SqM	340		
5	Painting of hull & side plate from keel to main deck with one coat of Zinc Chromate primer and two coats of anti crossive paint(Shalimar marine paint) as per direction of IWT Surveyor/ EIC.	SqM	340		
6	Sea chest, Mud box, Stainer are to be checked, repaired, cleaned and painted as per direction of IWT surveyor/EIC..				
a	Labour charges.	No.	2		
b	Cost of spare (Actual + 10 % basis as required)				
7	All main sea suction valve and sea line valves are to be serviced as per direction of IWT surveyor/EIC.				
a	Labour charges	No.	8		
b	Cost of spare (Actual + 10 % basis as required)				
8	Dredger pump suciton pipe(short piece) is checked and if required,same is to be renewed with both side flange as per sample. Dia - 450 mm, length 1.5M				
a	Labour charges	No.	1		
b	Cost of spare (Actual + 10 % basis as required)				
9	Wheel house wooden almirah and desk ply wood and door is damaged. The same is to be renewed/repaired.	Job Comp	1		
10	Rubber channel of wheel house window glass is damaged, to be checked and renewed.				
a	Labour charges	No.	4		

b	Cost of spare (Actual + 10 % basis as required)				
11	The operating lever in wheel house is not working properly, same is to be checked and repaired if required same to be renewed by substitutes.				
a	Labour charges	No.	6		
b	Cost of spare (Actual + 10 % basis as required)				
12	Wheel house foundation (mounting) is damaged. The damaged mounting is to be renewed	No.	4		
13	Dredge pump clutch unit is to be over hauled including checking of Hydraulic and electric line.				
a	Labour charges	No.	1		
b	Cost of spare (Actual + 10 % basis as required)				
14	Hand operated crane is not moving. The same is to be checked and rectified the defects.				
a	Labour charges	No.	1		
b	Cost of spare (Actual + 10 % basis as required)				
15	Store hatch rubber packing is to be renewed	No.	2		
16	Chipping and wire brushed, cleaned and painting by two coats of deck plate, superstructure, A frame, crane, cutter unit other fitting etc	sqm	600		
17	Grease pump is to be serviced and cleaned the all greasing point & pipe for proper injection of grease.				
a	Labour charges	No.	1		
b	Cost of spare (Actual + 10 % basis as required)				
18	Speed control lever wire and pulley of Aux. and main engine from wheel house is not working. The same is to be repaired.	No.	2		
19	Fire hydrant valve is to be serviced.				
a	Labour charges	No.	1		
b	Cost of spare (Actual + 10 % basis as required)				
20	Main and Aux- engine oil is leaking from PT pump. Same is to be arrested.	No.	2		

21	Entire system of Hydraulic function is to be checked and calibrated as per performance and function is to be made as per requirement including its pipe line, motor, valve solenoids etc, leakage of oil to be arrested. If required hydraulic pipes are to be renewed.				
a	Labour charges	Job	1		
b	Cost of spare (Actual + 10 % basis as required)				
22	Fire extinguisher is to be supplied				
a	Foam type - 9 lts	No	2		
b	DGP - 5 kg	No	2		
23	Routine maintenance of Main engine make cummins engine, model no. KTA - 2300 is to be done.				
a	Labour charges	No.	1		
b	Cost of spare (Actual + 10 % basis as required)				
24	Routine maintenance of Aux. engine make cummins engine, model no. NT-855 P is to be done.				
a	Labour charges	No.	1		
b	Cost of spare (Actual + 10 % basis as required)				
25	Dredge pump discharge suction pressure meter is to be renewed including labour and materials.	No	1		
26	Supply of 18 mm dia, 6/19 steel core, IWRC galvanized steel wire rope make Usha martine	Mtr	300		
27	Battery charger is not working. The same is to be checked and rectified the defects.				
a	Labour charges	No.	1		
b	Cost of spare (Actual + 10 % basis as required)				
28	Supply of fire hose dia-3",L-30Mtr	No.	2		
	Total Rs.				

ANNEXURE - E**BOQ for Dry dock repair of HB Nandadevi during the year 2011- 12****L- 26.5 M, B - 9.0 M, Depth - 2.0 M, Draft - 0.8 M, GRT - 205 .**

SL. NO	DESCRIPTION OF WORK	UNIT	QTY	RATE	AMOUNT
1	Docking & Undocking, dockhire and mooring charges	Compt.	Compt.		
2	Ultrasonic testing is to be done of hull & deck plate as required as per direction of IWT srveyor / EIC.	Spot	150		
3	Cropping and renewal of under water Hull plates, deck, angles, frames, bracket, etc if required as per direction of IWT Surveyor / EIC.	Ton	1		
4	Chipping, scrapping wire brushing & cleaning of under water hull plates from keel to LWL	Sqm	250		
5	Painting of hull & side plate from keel to water level with one coat of Zinc Chromate primer and two coats of anti crossive paint(Shalimar marine paint) as per direction of IWT Surveyor/ EIC.	Sqm	250		
6	Water level to deck ship side, deck officer & crew cabin, officer's Bathroom & Mess in side and other fitment are to be properally cleaned and painted by two coats of existing colour marine paint(Shalimar make).	Sqm	500		
7	All main sea suction valve and sea line valves are to be serviced as per direction of IWT surveyor/EIC.				
a)	Labour charges	No.	4		
b)	Cost of spare (Actual + 10 % basis as required)	LS			
8	Sea chest, mud box, strainer are to be checked, cleaned, repaired and painted	No.	2		
9	Fire hydrant valves are to be serviced				
a)	Labour charges	No.	3		
b)	Cost of spare (Actual + 10 % basis as required)	LS			
10	Blige is to be properelly cleaned.	Job	1		
11	Fire extinguisher to be serviced, refilled and tested				
a)	Foam type - 9 kgs	No.	3		
b)	DCP - 5 kgs	No.	3		
c)	Water Co2 - 9 Ltr	No.	2		

12	Routine Maintenance of Both Gen-set engine make kirloskar type 3R1040, 31/42/KW/HP, alternator 25KV to be serviced & checking proper alignment with foundation.				
a)	Labour charges	No.	2		
b)	Cost of spare (Actual + 10 % basis as required)	LS	1		
13	Water taps of bathroom is to be renewed	No.	2		
14	All door & window, Almirah, to be checked repaired / renewed & with locking arrangement.				
a)	Labour charges	Comp Job	1		
b)	Cost of spare (Actual + 10 % basis as required)	LS			
15	Side railing pipe is bended. The bended pipe is straightened, welded and if required same is to be renewed	RM	3		
16	Sea water and fresh water pump are to be serviced				
a)	Labour charges	No.	2		
b)	Cost of spare (Actual + 10 % basis as required)	LS			
17	All electrical line its fittings and installation i.e. navigation light, fan, bulb, tube, search light, exhaust fan, and electrical panel AC/DC to be checked/ serviced and rectified the defects.				
a)	Labour charges	Compt. Job	1		
b)	Cost of spare (Actual + 10 % basis as required)	LS			
18	Engineroom blower is to be serviced				
a)	Labour charges	No.	2		
b)	Cost of spare (Actual + 10 % basis as required)	LS			
19	Galley and Bathroom exhaust fan is to be serviced				
a)	Labour charges	No.	2		
b)	Cost of spare (Actual + 10 % basis as required)	LS			
20	Rotary pump is to be serviced				
a)	Labour charges	No.	2		
b)	Cost of spare (Actual + 10 % basis as required)	LS			
21	200 ltr. Refrigerator is to be serviced.				
a)	Labour charges	No.	1		
b)	Cost of spare (Actual + 10 % basis as required)	LS			

22	Electric wall fan is to be serviced				
a)	Labour charges	No.	10		
b)	Cost of spare (Actual + 10 % basis as required)	LS			
23	Water is leaking in engine room from bathroom.The same is to be checked and arrested the leakage.	Job	1		
24	1000 Ltr cap. Water tank(Sintex) is to be renewed.	No.	2		
25	32 KL cap.Fresh water reserve tank is to properly cleaned and painted/cemented.	No.	2		
	Total Rs.				

ANNEXURE - F**BOQ for Dry dock repair of Dumb Barge Sucheta during the year 2011- 12****L- 40.0 M, B - 8.0 M, Depth - 2.0 M, Draft - 1.2M, GRT - 233 .**

SL. NO	DESCRIPTION OF WORK	UNIT	QTY	RATE	AMOUNT
1	Docking & Undocking, dockhire and mooring charges	Compt.	Compt.		
2	Ultrasonic testing is to be done of hull & deck plate as required as per direction of IWT srveyor / EIC.	Spot	200		
3	Cropping and renewal of under water Hull plates, deck, angles, frames, bracket, etc if required as per direction of IWT Surveyor / EIC.	Ton	2		
4	Chipping, scrapping wire brushing & cleaning of under water hull plates from keel to LWL	Sqm	400		
5	Painting of hull & side plate from keel to water level with one coat of Zinc Chromate primer and two coats of anti crossive paint(Shalimar marine paint) as per direction of IWT Surveyor/ EIC.	Sqm	400		
6	LWL to deck, main deck, cargo hold, crew cabin and other fitting are to be scrapped, wire brushed, cleaned and painted by two coats of existing colour marine paint (Shalimar Paint).	Sqm	1000		
7	All Anchor chain is to be drawn out, cleaned and painted as per direction of IWT Surveyor/ EIC. (90' x 4)	Length	4		
8	Chain compartment is to be chipped, scrapped, wire brushed, cleaned and painted by two coats of existing colour marine paint(Shalimar Paint).	Sqm	100		
9	1000 Ltr. Cap.sintex water tank is to be renewed	No	1		
10	Anchor winch is to be serviced.				
a)	Labour Charge	No.	1		
b)	Cost of spare (Actual + 10 % basis as required)	LS			
11	Good quality Mattreses of crews bed are to be renewed,Size- L-6'.B-3',Th- 4"	No	2		
13	Cargo hold ownig structure(pipe) is bended/damaged. The same is to be straightened,welded and damaged pipe is to be renewed	Job	1		
14	Window of crews cabin and door of toilet is to be repaired including labour and materials	Job	1		
15	Supply of 18 mm dia, 6/19 steel core, IWRC galvanized steel wire rope make Usha martine with TC	Mtr	220		
	Total Rs.				

ANNEXURE - G**BOQ for afloat repair of W.B. Lily during the year 2011-12**

L- 24.58 M, B - 8.56 M, Depth - 2 M, Draft - 1.2 M, GRT - 131 .

SL.NO	DESCRIPTION OF WORK	UNIT	QTY	RATE	AMOUNT
1	Hand Follow - up steering of STBD side electrical / electronical/ hydraulic line are to be checked and rectified the defects. If required the PCB, Repeat back unit (Rudder sensor) and Hydraulic valve to be repaired / renewed.				
a)	Labour charges	No.	1		
c)	Cost of spare (actual + 10 % basis if required)	LS			
2	Top overhauling of Generator engine model no. DAF 615 ,HP-65, is to be done.				
a)	Labour charges	No.	1		
b)	Cost of spare (actual + 10 % basis if required)	LS			
3	Port side & STBD side pneumatic clutch is not working properly, electric line / electronic line / panel board/ air lined and clutch plate are to be checked and rectified the defects as per norms..				
a)	Labour charges	No.	2		
b)	Cost of spare (actual + 10 % basis if required)	LS			
4	All almirah lock is to be renewed as per requirement including labour & material	No.	10		
5	Deck Effer Crane operating lever/switch is not working properly. The same is to be checked and rectified the defect including all electrical and electronic, hydraulic line. switch pannel board etc.				
a)	Labour charges	No.	1		
b)	Cost of spare (actual + 10 % basis if required)	LS			
6	Fire extinguisher is to be serviced, refilled and tested				
a)	Foam type- 9 kgs	No.	8		
b)	Dry Powder - 5 kgs	No.	3		
c)	Mechanical Foam - 9 lts	No.	6		

7	50 KVA Alternator is to be serviced and insulation measurement is to be done.				
a)	Labour charges	No.	1		
b)	Cost of spare (actual + 10 % basis if required)				
8	Both HRP oil sensor line and sensor is to be checked and calibrated				
a)	Labour charges	No.	2		
b)	Cost of spare (actual + 10 % basis if required)	LS			
9	Routine Maintenance of Main Engine make DAF - 1160, HP 265 is to be done.				
a)	Labour charges	No.	2		
b)	Cost of spare (actual + 10 % basis if required)	LS			
10	Port side Main Engine Fuel pump and all injector are to be serviced and calibrated.				
a)	Labour charges	No.	1		
b)	Cost of spare (actual + 10 % basis if required)	LS			
11	Air bottle valve is leaking. The same is to be checked and rectified the defects including labour & materials.	No.	1		
12	Hand air compressor pump is to be serviced.				
a)	Labour charges	No.	1		
b)	Cost of spare (actual + 10 % basis if required)	LS			
	Total Rs.				

ANNEXURE - H**BOQ for afloat repair of Tug P.T.Tilak during the year 2011-12****L- 20.5 M, B - 6.5 M, Depth - 2 M, Draft - 1.2 M, GRT - 101 .**

SL. NO	DESCRIPTION OF WORK	UNIT	QTY	RATE	AMOUNT
1	Fresh water pump and sea water pump of both main engine is to be serviced /repaired.				
a	Labour charges	NO	4		
b	Cost of spare (actual + 10 % basis if required)	LS			
2	Cooler of main engine gear oil is to be opened, serviced, repaired and refitted				
a	Labour charges	NO	2		
b	Cost of spare (actual + 10 % basis if required)	LS			
3	G.S. pump is not working properly. The pump is to be checked and defects to be repaired.				
a	Labour charges	NO	1		
b	Cost of spare (actual + 10 % basis if required)	LS			
4	Control pannel board of both main engine is to be checked and defects to be repaired				
a	Labour charges	NO	2		
b	Cost of spare (actual + 10 % basis if required)	LS			
5	Blower of Engine room is not working. The same is to be repaired				
a	Labour charges	NO	2		
b	Cost of spare (actual + 10 % basis if required)	LS			
6	Stbd side gear box is to be overhauled including clutch unit.				
a	Labour charges	NO	1		
b	Cost of spare (actual + 10 % basis if required)	LS			
7	Self starter of stbd main engine, 24 volt is not working properly. The same is to be serviced/repaired.				
a	Labour charges	NO	1		
b	Cost of spare (actual + 10 % basis if required)	LS			
8	Fresh water pump and sea water pump of both Gen.set engine is to be repaired.				

a	Labour charges	NO	4		
b	Cost of spare (actual + 10 % basis if required)	LS			
9	Both rudder assembly to be dismantled, rudder stock, shaft, bushes etc to be checked and if required same to be build up as per OE size (as per drawing) and fitted back in position				
a	Labour charge	No.	2		
b	Machining charges (actual + 10 % basis if required)	L-S			
c	Cost of spare (actual + 10 % basis if required)	L-S			
10	Rudder indicator is not working. The complete unit is to be checked and rectified the defects.				
a	Labour charge	No.	1		
b	Cost of spare (actual + 10 % basis if required)	L-S			
11	All blast tanks (khond) including chain compartment is to be chipped, scrapped, wire brushed, cleaned and painted by two coats of existing colour marine paint(Shalimar Paint).	Sqm	450		
12	Inner side plate of engine room and crew cabin is to be chipped, scrapped, wire brushed, cleaned and painted by two coats of existing colour marine paint(Shalimar Paint).	Sqm	300		
13	hydraulic Pump of rudder is to be serviced.				
a	Labour charge	No.	1		
b	Cost of spare (actual + 10 % basis if required)	L-S			
14	Emergency and blige pump is to be serviced.				
a	Labour charge	No	2		
b	Cost of spare (actual + 10 % basis if required)				
	Total Rs				

ANNEXURE - I**BOQ for afloat repair of Tug S.C. Bose during the year 2011-12****L- 21.5 M, B - 6.5 M, Depth - 2 M, Draft - 1.2 M, GRT - 73 .**

SL.NO	DESCRIPTION OF WORK	UNIT	QTY	RATE	AMOUNT
1	Port side main engine, Make-cummins,model-NT855 M,HP-270 complete overhauling is to be done as the lub Oil pressure is very low.				
a	Labour charges	NO	1		
b	Cost of spare (actual + 10 % basis if required)	LS			
c	Machining charge(actual + 10 % basis if required)	LS			
2	Routine maintence of stbd side main engine is to be done. Engine make -cummins,model-NT-855 M, HP-270 .				
a	Labour charges	NO	1		
b	Cost of spare (actual + 10 % basis if required)	LS			
3	Clutch of sea water pump of main engine is to be serviced.				
a	Labour charges	NO	1		
b	Cost of spare (actual + 10 % basis if required)	LS			
4	Checking / repairing / servicing (if required replacement of worn out parts) of entire electrical lines / electronic lines (AC / DC) distribution line, pannel board, switch & holders, tube light, navigation light etc.				
a	Labour charges	Comp Job	1		
b	Cost of spare (actual + 10 % basis if required)	LS			
5	Engine room blower is to be serviced.				
a	Labour charges	NO	3		
b	Cost of spare (actual + 10 % basis if required)	LS			
6	Silencer of 32 BHP gen set engine is damaged. The same is to be renewed and lagging to be made.	Job	1		
7	Water suction of blige line is to be checked and rectified the defects as the pump is not suctioning the water.				
a	Labour charges	Job	1		
b	Cost of spare (actual + 10 % basis if required)	LS			
8	Valve of suction and delivery pipe line of fire pump is to be checked and serviced. .				
a	Labour charges	NO	1		
b	Cost of spare (actual + 10 % basis if required)	LS			

9	500 ltr HSD service tank is to be cleaned.	NO	2		
10	Motor of anchor winch is to be serviced.				
a	Labour charges	NO	1		
b	Cost of spare (actual + 10 % basis if required)	LS			
11	The entire ship side shell plate from LWL to main deck, deck plate, superstructure, engine room, bollards etc are to be scrapped, wire brushed and chipped.	Sqm.	600		
12	The entire ship side shell plate from LWL to main deck, deck plate, superstructure, engine room, bollards etc are to be painted by one coat of zinc cromate primer and two coats of existing colour marine paint(Shalimar Paint),	Sqm.	600		
13	Owning structure is to be fabricated and installed on FWD deck and to be covered with 2.5mm thickness FRP sheet. Size: H-2.5M, L - 3.2M, B- 4.5M.				
a	Labour charges	NO	1		
b	Cost of spare (actual + 10 % basis if required)	LS			
14	Fire extinguisher is to be serviced and refilled.				
a	Foam type – 9 ltrs.	No	4		
b	DCP – 5 Kgs	No	4		
c	Water CO2 – 9ltrs.	No.	3		
15	Exhaust fan of bath room is not working. The same is to be checked and rectified the defects including labour and materials	No.	1		
16	Salwood bench is to be made & supplied size - L-6',B-2'	No	2		
	Total Rs.				

ANNEXURE - J**BOQ for Afloat repair of CL Kasturba during the year 2011- 12****L- 28.0 M, B - 6.21 M, Depth - 1.50 M, Draft - 0.8 M, GRT - 92.50 .**

SL.NO	DESCRIPTION OF WORK	UNIT	QTY	RATE	AMOUNT
1	Both Main engine fresh water pump is to be checked & serviced				
a)	Labour Charge	No.	2		
b)	Cost of spare (Actual + 10 % basis as required)	LS			
2	Both main engine Dynamo is to be serviced.				
a)	Labour Charge	No.	2		
b)	Cost of spare (Actual + 10 % basis as required)	LS			
3	All AC/DC Electric line, including pannel board, wiring,switch etc are to be checked and rectified the defects.				
a)	Labour Charge	Job	1		
b)	Cost of spare (Actual + 10 % basis as required)	LS			
4	Wheel huose gear arrangement is defective. The same is to be checked including control lever,transmission Chain/rod,pully etc and rectified the defects.	Job	1		
5	Fire extinguisher is to be serviced, hydraulic tested and refilled.				
a)	Foam type - 9 kgs	No.	7		
b)	DGP - 5 kgs	No.	3		
6	Window glass of crew cabin is broken. The damaged glass is to be renewed including labour and materials(size 2' x 2')-2nos.	Comp job	1		
7	Good quality Mattreses of crews bed are to be renewed,Size- L-6'.B-3',Th- 4"	No	7		
8	Reserve HSD tank is to be properly cleaned as per direction of IWT Surveyor/EIC	Comp job	1		
9	Generator Engine,Make-Kirlosker,5HP is to be seviced .				
a)	Labour charge	No	1		
b)	Cost of spare (Actual + 10 % basis as required)	LS	1		

10	Both rudder assembly is to be opened and checking the rudder trueness, blade and its flange, checking of clearness of bushes and if required same to be buildup, repaired and fitted back in OE position.				
a)	Labour Charge	No.	2		
b)	Cost of spare (Actual + 10 % basis as required)	LS			
c)	Cost of machining / remetling (Actual + 10%)	LS			
11	Salwood bench is to be made & supplied size -L-6',B-2'	No	2		
12	Stbd main engine, self starter is to be serviced				
a)	Labour Charge	No.	1		
b)	Cost of spare (Actual + 10 % basis as required)	LS			
13	Exhaust is leaking from exhaust pipe line of 5HP Gen.set. The same is to be arrested including labour and materials	No	1		
14	The entire ship side shell plate from LWL to main deck, main deck,superstructure,railing, bollard,ramp,blast tank chain & rudder compartmentetc are to be scrapped, wire brushed and chipped.	Sqm.	1000		
15	The entire ship side shell plate from LWL to main deck, main deck,superstructure,railing, bollard,ramp,blast tank chain & rudder compartmentetc are to be painted by 3 coats of existing colour marine paint(Shalimar)	Sqm.	1000		
16	Anchor chain is to be drawn out,cleaned and painted	Length	6		
17	Water tank is to be cleaned and cemented,Cap.-6000Ltr	No	2		
18	chain line of Rudder driven is not working properly.The entire unit is to be checked and rectified the defects including labour and materials	No	1		
19	Both main engine injector nozzle is to be pressure tested and calibrated	No	12		
Total Amount					

ANNEXURE - K**BOQ for Afloat repair of CSD Mahananda during the year 2011-12****L- 40.3 M, B - 7.0 M, Depth - 2.46 M, Draft - 1.2 M, GRT - 108 .**

SL.NO	DESCRIPTION OF WORK	UNIT	QTY	RATE	AMOUNT
1	Anchor swing pulley & its related assoseries are to be serviced.				
a	Labour charge	Comp Job	1		
b	Cost of spare (actual + 10 % basis if required)	LS	1		
2	dredged material Discharge nozzel is to be repaired/renewed	No	1		
3	FRP sheet of owning structure is damaged. The damaged sheet is to be renewed(size of sheet- 3M x 1M X2.5mm) and same is to be fixed by Iron Bit.	No.	8		
4	Supply of good quality wheel chair for control room	No	1		
5	Joint Anchor winch switch is not working . The electrical/electronic line is to be checked and rectified the defects.	Job	1		
6	Both spud lifting ramp safety rubber guard is damaged .The same is to be renewed.	No	1		
7	VHF is not working properly. The same is to be checked and rectified the defects.				
a	Labour charge	Comp Job	1		
b	Cost of spare (actual + 10 % basis if required)	LS	1		
8	Radiator of gen. set engine is to be properly cleaned.	No	2		
9	Fire extinguisher to be serviced, refitted and tested				
a	Foam type - 9 lts	No	2		
b	DCP - 5 kg	No	2		
10	Checking / repairing / servicing (if required replacement of worn out parts) of entire electrical lines / electronic lines (AC / DC) distribution line, pannel board, navigation light, PCB, connected with hydraulic lines / pneumatic lines, switch & holders, tube light.				
a	Labour charges	Comp Job	1		
b	Cost of spare (actual + 10 % basis if required)	LS			

11	Dredge pump water is leaking through dredge delivery pipe (distace piece), to be checked and arrested the leakage				
a	Labour charge	Comp Job	1		
b	Cost of spare (actual + 10 % basis if required)	LS	1		
12	Manufacturing and supply of solid iron spud pin.Size-50mm dia and 85cm in length	No	2		
13	Manufacturing and supply of 15mm steel plate ring for spud .Size-inner dia.450 mm and outer dia.500mm,	No	2		
	Total Rs.				

BOQ for afloat repair of HB Vindyas during the year 2011- 12**L- 26.5 M, B - 9.0 M, Depth - 2.0 M, Draft - 0.8 M, GRT - 205 .**

SL. NO	DESCRIPTION OF WORK	UNIT	QTY	RATE	AMOUNT
1	Fresh water pump is not suctioning the water. The suction pipe line and pump is to be checked and rectified the defects.				
a	Labour charge	No	1		
b	Cost of spare (Actual + 10 % basis as required)				
2	Toilet flushing valve is to be renewed.	No	1		
3	200 Ltr cap. Refrigerator is to be serviced.				
a	Labour charge	No	1		
b	Cost of spare (Actual + 10 % basis as required)				
4	Handle lock of crew cabin is to be renewed.	No	3		
5	Damaged tiles of officer's bathroom is to be renewed, size of tiles- 4" x 8"	No	25		
6	Water level to deck ship side, deck officer & crew cabin, officer's Bathroom & Mess in side and other fitment are to be properly cleaned and painted by two coats of existing colour marine paint(Shalimar make).	Sqm	500		
7	Fire extinguisher to be serviced, refilled and tested				
a	Foam type - 9 kgs	No.	3		
b	DCP - 5 kgs	No.	3		
c	Water Co2 - 9 Ltr	No.	2		
8	Wooden almirah lock is to be renewed.	No	7		
9	Drain pipe of Wash basin is to be renewed	No	5		
10	All electrical line its fittings and installation i.e. navigation light, fan, bulb, tube, search light, exhaust fan, and electrical panel AC/DC to be checked/ serviced and rectified the defects.				
a	Labour charges	Compt. Job	1		
b	Cost of spare (Actual + 10 % basis as required)	L.s			
	Total Rs.				

ANNEXURE - M**BOQ for afloat repair of HB Himgiri during the year 2011-12****L- 30.5 M, B - 7.6 M, Draft - 0.8 M, GRT - 250 .**

Sl. No	DESCRIPTION OF WORK	UNIT	QTY	RATE	AMOUNT
1	Side railing pipe is bended. The bended pipe is straightened,welded and if required same is to be renewed	RM	3		
2	Checking / servicing / repairing / replacement of worn out parts of all electrical line 220/440 volt, distribution line, pannel board switch & holders, tube light sets, bulb, wall fans, exhaust fan, etc.				
a)	Labour Charge	Comp job	1		
b)	Cost of spare (Actual + 10 %)	LS			
3	Battery charger is not working. The same is to be checked and rectified the defects.				
a)	Labour charges	Compt. Job	1		
b)	Cost of spare (Actual + 10 % basis as required)	L.s			
4	Anchor winch is to be serviced..				
a)	Labour charges	No	1		
b)	Cost of spare (Actual + 10 % basis as required)				
5	3 HP,3-Phase,Motor of Fresh water pump is to be repaired.				
a)	Labour charges	No	1		
b)	Cost of spare (Actual + 10 % basis as required)				
6	Water level to deck ship side, deck officer & crew cabin, officer's Bathroom & Mess in side and other fitment are to be properly cleaned and painted by two coats of existing colour marine paint(Shalimar make).	Sqm	500		
7	Fire extinguisher to be serviced, refilled and tested				
a)	Foam type - 9 kgs	No.	3		

b)	DCP - 5 kgs	No.	3		
c	Water Co2 - 9 Ltr	No.	2		
8	Routine Maintance of Both Gen-set engine make kirloskar type 3R1040, 31/42/KW/HP, alternator 25KV are to be serviced & checking proper alignment with foundation.				
a)	Labour Charge	No.	2		
b)	Cost of spare (Actual + 10 % basis as required)	LS	1		
g	Handle lock of crew cabin is to be renewed.	No	12		
	Total Rs.				

THE END
