



Rajiv Gandhi Centre for Aquaculture

(MPEDA, Ministry of Commerce & Industry, Govt. of India)



TENDER DOCUMENT

(Tender No. 2026_RGCA_892501)

**Establishment of Broodstock Multiplication Centre for
Tiger Shrimp at Thekkurichi Village, Rajakkamangalam,
Kanyakumari District, Tamil Nadu**

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Introduction:

Rajiv Gandhi Centre for Aquaculture (RGCA) is the Research & Development arm of the Marine Products Export Development Authority. The plan scheme of MPEDA under the R&D head is being implemented by RGCA. RGCA is functioning as a Society, established in the year 1995 and registered under the Tamil Nadu Societies Registration Act, 1975. RGCA has been constituted with the objective of Not-for- Profit and for the providing necessary training and disseminating the technologies to the stakeholders for diversified aquaculture.

RGCA is involved in the development of various Sustainable Aquaculture technologies that are Bio-secure, eco-friendly and that offer traceability for seed production and grow out farming of various aquatic species, those having export potential in particular. RGCA is also developing a state-of-the-art Technology Transfer and Training Centre for disseminating the technologies developed at the various projects established at different locations in the country to the Aquaculture Industry in order to strengthen the raw material production base for export of quality marine products from India. RGCA is first of its kind in India for Diversified Aquaculture.

RGCA is presently pursuing 13 important aquaculture projects at species specific locations across the country. The headquarters of RGCA is located at Sirkali, Tamil Nadu. RGCA has successfully completed 25 years of establishment of the society by the year 2021.

1. INSTRUCTIONS TO BIDDER

1.1 General:

- (1) The Director, Rajiv Gandhi Centre for Aquaculture (RGCA), invites bids for the Construction Works, herein after referred as "works", of the Construction Works - Establishment of Broodstock Multiplication Centre for Tiger Shrimp, herein after referred collectively as "works", at its RGCA- at Thekkurichi Village, Rajakkamangalam, Kanyakumari District, Tamil Nadu herein referred to as "Project Site".
- (2) Site Inspection: Each bidder shall **MANDATORILY** visit and inspect the project site, before submitting the bid, on the date and time specified in the bid data, to ascertain all the necessary information, including the risks, contingencies, nature of ground, unloading & installation etc., and to acquaint himself with the local conditions.

- (3) Tender document shall mean to include the current tender document, tender forms, bill of quantity, addendum/corrigendum, if any issued in future.
- (4) The Notice Inviting Tender (NIT) is an invitation to offer made on the condition that the bidder will sign the Integrity Agreement, which is an integral part of tender/bid documents, failing which the bidder will stand disqualified from the tendering process and the bid of the bidder would be summarily rejected.

1.2 Scope of Work:

- (1) The scope of work under this contract, at project site, shall broadly include:
 - A) Civil Works
 - (i) Intake Pump shed
 - (ii) Finishing the floor of remaining area available inside the grow out shed
 - (iii) 6 numbers of 18 meters diameter and 1.35 meters height Geo membrane tank for Grow out culture & construction of civil works, required for PVC drainage pipes and installation, cat walks materials and installation (rearing tanks as demonstrated by ICAR-CIBA for intensive shrimp production)
 - (iv) Duty Room
 - (v) Wet lab facility
 - (vi) Approach road and parking area inside the facility
 - (vii) PCR Lab civil works
 - (viii) Strengthening the Bio security of HDPE lined pond reservoir by covering Non asbestos sheets supported with G.I/MS structures (Providing and laying 6 mm thick corrugated cement sheet (Non Asbestos sheet) with necessary J, or L hooks, bolts and nuts 8 mm dia, G.I. plain and bitumen washers or with self-drilling fastener and EPDM washers on structural roof truss work of Buildings. Providing and laying 6 mm thick corrugated cement sheet (Non Asbestos sheet) with necessary J, or L hooks, bolts and nuts 8 mm dia, G.I. plain and bitumen washers or with self-drilling fastener and EPDM washers on structural roof truss work of Buildings.)
 - (ix) Additional Fencing on the seaside to strengthen Biosecurity
 - B) Sanitary Plumbing Works
 - C) Aquaculture Plumbing Works
 - D) Electrical Works
 - E) Equipment's & machineries
- (2) Major works, as part of the scope of the work, shall include but not be limited to the following.
 - (i) Obtaining all necessary approvals/ clearances from appropriate Authorities, if any, relating to the work, including soil test, completion, etc.,
 - (ii) Earthwork in excavation and backfilling, including de-watering, if required, at all depths.

- (iii) Plain cement concrete in the form of mud mat for foundations of all types, plinth beams, trenches, non-suspended floor slabs and gutters, etc. at all depths.
- (iv) Pile foundation
- (v) Brick work in foundation and superstructure.
- (vi) RCC work in foundation, plinth beams, trenches, non-suspended floor slabs, etc, at all depths for various types of buildings at all heights.
- (vii) Architectural finishing works including but not limited to the following:
 - (viii) Floor finish
 - (ix) Structural truss / non- asbestos roofing works (Providing and laying 6 mm thick corrugated cement sheet (Non Asbestos sheet) with necessary J, or L hooks, bolts and nuts 8 mm dia, G.I. plain and bitumen washers or with self-drilling fastener and EPDM washers on structural roof truss work of Buildings. Providing and laying 6 mm thick corrugated cement sheet (Non Asbestos sheet) with necessary J, or L hooks, bolts and nuts 8 mm dia, G.I. plain and bitumen washers or with self-drilling fastener and EPDM washers on structural roof truss work of Buildings.)
 - (i) HDPE liner geomembrane tanks
 - (ii) Aquaculture plumbing works
 - (iii) Supply, Installation and commissioning of equipment and machineries.
 - (iv) Steel/Aluminium /UPVC doors and windows, ventilators etc.
 - (v) Plastering and Pointing
 - (vi) White washing, distempering, painting and polishing
 - (vii) Roofing
 - (viii) Sanitary fittings and fixtures
 - (ix) Supply & fixing of Pumps, Equipment's works
 - (x) Plumbing & Electrical works
 - (xi) Construction of peripheral drains, valve pits, cleanouts, manholes, etc. Supplying and fixing of metal inserts, steel, grating chequered plates, M.S. Rungs, manhole frame & Covers, vent pipes, strainers etc. Supplying and laying of waste and vent pipes, G.I. water pipe, gate valves etc.
 - (xii) Miscellaneous and all related ancillary works.

(2) All work shall be performed in accordance with the terms, conditions and approved drawings and as per the instructions of the Committee headed by the Director RGCA constituted for the purpose.

1.3 Bid Data:

Sl. No	Item	Description
1	Tender Reference No.	2026_RGCA_892501
2	Tender Inviting Authority	The Director, Rajiv Gandhi Centre for Aquaculture, (MPEDA, Ministry of Commerce & Industry, Govt. of India), 3/197, Poompuhar Road, Karaimedu Village, Sattanathapuram Post, Sirkali Taluk, Mayiladuthurai District, Tamil Nadu. Pincode: 609109. Ph: 04364 265200
3	Project Site	Rajiv Gandhi Centre for Aquaculture,(RGCA) (MPEDA, Ministry of Commerce & Industry, Govt. of India) Brood Stock Multiplication Centre (BMC) Theckkurichi, Ganapathipuram Post Rajakkamangalam -629 502, Kanyakumari District, Tamil Nadu.
4	Mode of Tendering - Bidding System - Type of Contract	e-Tender (CPP Portal) - Open Tender - Two Bid System - Percentage Rate Works Contract
5	Estimated Value of the Works	Rs. 4,92,00,258/- -(inclusive of all taxes & 18 % GST) (Rupees Four crore Ninety Two lakhs Two hundred and Fifty eight only.)
6	Tender Fee/ Cost of bid document	Rs. 11,800/- (Rupees Eleven Thousand Eight hundred Only)
7	Bid Security/ Earnest Money Deposit (EMD)	₹ 9,84,005/- (2% of Est. value) /- (Rupees Nine Lakhs Eighty Four Thousand and Five only)
8	Performance Guarantee/ Performance Security	4 % of the contract value (rounded off to the nearest thousand rupees)
9	Security Deposit/ Retention Money	5% of each running bill (rounded off to the nearest thousand rupees)
10	Work Completion Period	12 months from the date of execution of contract
11	Period of Bid Validity	180 days

12	Tender Publishing Date & Time	21.01.2026 (09:00 hrs)
13	Date and Time for visit and inspection of Project Site	From 11 AM to 4 PM on all days from the tender publishing date to the bid submission closing date, except on Saturdays, Sundays and Holidays.
14	Online Bid Submission Closing Date & Time	11.02.2026 (18:00 hrs) (21 days from published tender date)
15	Online Bid Opening of Techno commercial Bid (Cover-I)	13.02.2026 (11:00 hrs)
16	Online Price bid Opening (Cover-II)	Date & time to be intimated later to the bidders whose Techno-commercial Bids will be found responsive
17	Defect Liability Period (DLP)	365 Days from the date of Work Completion Certificate

1.4 Eligibility or Pre-qualification Criteria:

Bidder shall fulfil all the eligibility criteria (otherwise specified as pre-qualification criteria) as detailed below. Bids which fails to fulfil, any one or more of the below eligibility criteria, will be considered non- responsive.

- (3) The bidder shall submit pre-qualification form (as per format provided in Form-1) duly filled. All data along with supporting documents shall mandatorily be filled/ uploaded
- (4) The bidder/ firm/ company should have a valid registration from PWD/ CPWD/ MES/ ISRO and enlisted value should be equivalent to or more than the estimated value of the works.
- (5) The bidder shall submit a copy of the registration document for the company/firm (not applicable in case of proprietary or unregistered partnership firm).
- (6) The bidder/ firm/ company should possess valid GST registration (submit photocopy).

(7) The bidder shall submit a copy of the PAN of the company/firm (PAN of the Proprietor in case of a proprietary firm).

(8) The bidder shall submit proof of successful completion of either of the below works, during the last Three(03) years:

- One construction work in the field of building construction, costing not less than the amount equal to 80% of the estimated cost; or
- Two construction works in the field of building construction, costing not less than the amount equal to 50% of the estimated cost; or
- Three construction works in the field of building construction, costing not less than the amount equal to 40% of the estimated cost.

(9) The bidder shall visit the project site and submit the Site Inspection Declaration Form, duly signed by the Project In-Charge. The signed copy of the Site Inspection Declaration Form must be submitted along with the tender documents. Bids submitted without the Site Inspection Declaration Form shall be rejected.

(10) Financial Eligibility Criteria/ Financial Capabilities

- a. Annual Contractual payments received during the last 03 years or the current financial year up to the date of inviting of tender must be at least 150% of the advertised estimated value of this tender. Audited Balance Sheet and Profit and Loss Statement and Form 16A/26AS generated through TRACES of Income Tax Department of India, certified by the Chartered Accountant shall be submitted
- b. Solvency Certificate from the Competent Authority (District Magistrate) or Liquidity Ratio certified by the Chartered Accountant shall be submitted. (Acceptable Liquidity Ratio is more than 01).
- c. Past 03 years net worth and construction turnover certificates, duly certified by Chartered Accountant shall be submitted. (Acceptable Annual average construction turnover should be at least 40% of the advertised value of tender)

(11) The bidder shall submit in the portal, a copy of duly filled Integrity pact as per the format provided in Form-2.

(12) The bidder shall visit and inspect the project site any time during the time and date specified in the bid data for the purpose and submit a self-certified copy, while uploading in the portal, as a proof of the visit (As per format provided in Form-3).

1.5 Time Schedule: Total duration 12 Months:

S. No	Description	Project duration in Month											
		Month-1	Month-2	Month-3	Month-4	Month-5	Month-6	Month-7	Month-8	Month-9	Month-10	Month-11	Month-12
	A. Civil Works												
1	Intake Pump Shed												
2	Finishing the floor of Rearing shed												
3	Geo Membrane tanks												
4	Duty Room												
5	Wet lab												
6	Approach road& parking												
7	PCR lab civil works												
8	HDPE lined Pond/Reservoir roof shed												
9	Additional fencing												
10	Electrical works												
11	Solar power panel works												
12	Plumbing works												
13	Aquaculture Plumbing works												
	B. Sanitary Plumbing												
	C. Aquaculture Plumbing												
	D. Electrical work												
	E. Equipment's & Machineries												

1.6 Payment Schedule:

Stage	Minimum value of Billing
Milestone 1	13 % of Work order value
Milestone 2	13 % of Work order value
Milestone 3	13 % of Work order value
Milestone 4	13 % of Work order value
Milestone 5	13 % of Work order value
Milestone 6	13 % of Work order value
Milestone 7	13 % of Work order value
Milestone 8	9 % of Work order value
5 % of Bill Value shall be deducted in every RA BILL and Final Bill	
5% of Deducted Security deposit and Retention amount shall be released after Receipt of work Completion Certificate	
5% of Deducted Security deposit and Retention amount shall be released after successful Completion of Defect Liability Period of 12 months	

Note 1: All above payments are subject to deductions of retention amount or any other amount as specified in the relevant paragraph, taxes and all other statutory deductions, if any.

Note 2: Release of payment with respect to retention amount, performance security and others (if any), will be as per the provisions specified in the relevant paragraph.

2. General Conditions of the Contract

2.1. Definitions:

In the tender document/ contract, as hereinafter defined, the following words and expressions shall have the meanings hereby assigned to them, except where the context otherwise requires.

- (1) “Approved” means, approved in writing, including subsequent written confirmation of previous verbal approval, by the competent authority and “approval” means approval in writing, including as aforesaid.
- (2) “Calendar day” means a period of twenty-four hours extending from midnight to midnight.
- (3) “Constructional Plant” means all appliances or things of whatsoever nature required in or about the execution of maintenance of the works but do not include materials or other things intended to form or forming part of the permanent works.
- (4) “Contract” means the conditions of contract, specifications, drawings, schedule of prices and all other documents included in the tender documents, including annexures, amendments/corrigendum (if any) and letter of acceptance .
- (5) “Contract Price” means the sum named in the Letter of acceptance, subject to such additions thereto or deductions there from as may be made under the provisions hereinafter contained.
- (6) “Contractor” means the person or persons, firm or company whose tender has been accepted by the Director RGCA and includes the contractor’s authorized representatives, workmen, staff, successors and permitted designs.
- (7) “Currency” shall mean the Indian National Rupees, herein after specified as “Rs.” or “INR”.

- (8) "Drawings" means the drawings referred to in the specification and any modification of such drawings approved in writing by the Director RGCA and such other drawings as may from time to time; be furnished or approved in writing by the Director RGCA.
- (9) "Engineer" means an official or a representative of the Director RGCA who will be overall in charge for the project.
- (10) "Government" shall mean the Government of India.
- (11) "Ministry" shall mean the Ministry of Commerce and Industry, Government of India.
- (12) "Month" means the Gregorian calendar month and all times shall be according to the Gregorian calendar.
- (13) "Permanent works" means the permanent works to be executed and maintained in accordance with the contract.
- (14) "RGCA" means the Rajiv Gandhi Centre for Aquaculture, acting through its Director and legal successors in title to and assignee of RGCA.
- (15) "Schedule of Rates" shall mean the relevant schedule(s) annexed to the tender document issued by the Director RGCA for the particular contract, and amendments issued thereto from time to time.
- (16) "Site", otherwise specified as "Project Site" or "Work Location", means the land and other places on, under, in or through which the permanent works or temporary works are to be executed and any other land and places provided by the Director RGCA for working space or any other purpose as may be specifically designated in the contract as forming part of the site.
- (17) "Specification" means the specification referred to in the tender and any modification thereof or addition thereto as may from time to time furnished or approved in writing by the Director RGCA.
- (18) "Temporary works" means all temporary works of every kind required in or about the execution or maintenance of the works.
- (19) "Tender date" means the closing date fixed for receipt of tenders as per notice inviting tenders or as extended by subsequent notification.
- (20) "Time" expressed by hours of the clock shall be according to the Indian Standard Time.

(21) "Works" shall mean the works to be executed in accordance with the contract or part thereof as the case may be and shall include all extra or additional, altered or substituted or temporary works as required for performance of the contract and urgent works needing urgent measures which in the opinion of the engineer become necessary during the process of work to obviate any risk or accident or failure.

2.2. Abbreviations:

In the tender document/ contract, as hereinafter defined, the following abbreviations shall have the meanings hereby assigned to them, except where the context otherwise requires.

CPWD	Central Public Works Department, Government of India
Gol	Government of India
GST	Goods and Services Tax
INR	Indian National Rupees
IS	Indian Standard
IST	Indian Standard Time
MoC	Ministry of Commerce and Industry, Government of India
MES	Military Engineering Services
MPEDA	Marine Products Export Development Authority, Government of India
PWD	Public Works Department of the State Government/ Union Territory
RGCA	Rajiv Gandhi Centre for Aquaculture

2.3. Interpretations:

- (1) Singular and Plural: Words importing the singular only also include the plural and vice versa, where the context requires.
- (2) Heading or Notes: The headings and marginal notes, in these conditions of contract shall not be deemed to be part thereof or to be taken into consideration in the interpretation or construction thereof of the contract.
- (3) Cost: The word "Cost" and shall be deemed to include overhead costs whether on or off the site.
- (4) Co-relation and Order of Precedence of Tender Documents: If the stipulations in the various tender documents be found to be at variance in any respect, one will override others (but only to the extent these are at variance) in the order or precedence as given in the list below, i.e., any particular item in the list will take precedence over all those placed lower down in the list.
 - (i) Description in the schedule of quantities.
 - (ii) Instructions to Bidder
 - (iii) Special conditions of the contract
 - (iv) Technical specifications for materials and workmanship and

drawings given herein

- (v) Conditions and requirements of tendering
- (vi) General conditions of the contract
- (vii) CPWD specifications
- (viii) IS specifications (latest version)

2.4. Contract and contract documents:

- (1) The bidder whose bid/ tender is accepted, is bound to execute an agreement with the Director RGCA in accordance with the draft annexed with this tender document, and other papers stated to be forming part thereof, but his liability under the contract shall commence from the date of written order to commence the work whether the agreement is drawn or not. The contractor shall bear all expenses in connection with the execution of the agreement including fees for stamping and registration of documents as required. Failure to execute the agreement in specified time shall entail action against the contractor as per the provisions stipulated in this tender documents.
- (2) The contractor shall, when called upon to do so, enter into and execute a contract, to be prepared and completed at the cost of the contractor, in the form with such modification as may be necessary.
- (3) The contract documents shall be drawn up in the English language. All correspondence, orders, notices etc. shall also be in English.
- (4) The laws of India and those of the State in which the works are situated shall apply to the contract.
- (5) The several documents forming the contract are to be taken as mutually explanatory of one another, but in case of ambiguities or discrepancies the same shall be explained and adjusted as per the provisions in clause "correlation order of precedence of tender documents" of this contract, by the engineer, who shall thereupon issue to the contractor instructions thereon and these shall be final and binding on the contractor.
- (6) Except with the prior written approval of the Director RGCA and subject to such conditions as may be prescribed, the contractor and/ or any member or his organization shall not in any case communicate to any person or entity any information in connection with the performance of the services or in carrying out the works nor make public any information for the purpose of publication or advertisement. All matters relative to the contract shall be treated by the contractor as private and confidential.
- (7) In case of an interference or temporary interruption become essential for carrying out the works, the contractor shall approach the Director RGCA

and carry out all measures that the Director, RGCA may direct or through his personal intervention, by the exercise of authority by person or persons connected with the works.

2.5. Duties and Powers of the Director RGCA:

- (1) The Director RGCA shall carry out such duties in issuing decisions, certificates and orders as are specified in the contract. Fixation and acceptance of rates for altered or substituted items of work or for additional items of work shall however always rest with the same authority (by designation) as had accepted the original tender (for and on behalf of the Director RGCA).
- (2) The engineer in-charge shall be responsible to the Director RGCA and his duties are to watch and supervise the works and to test and examine any materials to be used or workmanship employed in connection with the works. He shall have no authority to relieve the contractor of any of his duties or obligations neither under the contract nor except as expressly provided hereunder or elsewhere in the contract, neither to order any work involving delay or any extra payment by the Director RGCA, nor to make any variation of, or in the works.
- (3) The Director RGCA may from time to time in writing delegate to the engineer in-charge any of the powers and authorities vested in the Director RGCA and shall furnish to the contractor and to the engineer in-charge a copy of all such written delegations of powers and authorities. Any written instruction or approval given by the engineer in-charge to the contractor within the terms of such delegations, but not otherwise, shall bind the contractor and the Director RGCA as though it had been given by the Director RGCA.
- (4) Failure of the engineer in-charge to disapprove any work or materials shall not prejudice the power of the Director RGCA thereafter to disapprove such work or materials and to order the pulling down, removal or breaking up thereof.
- (5) If the contractor shall be dissatisfied by reasons of any decision of the engineer in-charge he shall be entitled to refer the matter to the Director RGCA, who shall thereupon confirm, reverse or vary such decision. The Director RGCA decision shall be conclusive and binding on the contractor.
- (6) The Director RGCA and the engineer in-charge shall also perform such other duties and roles as specified elsewhere in this tender document.

2.6. Contractor's General Responsibilities:

- (1) The contractor shall, subject to the provisions of the contract, and with due care and diligence, execute and maintain the works and provide all labour, including the supervision thereof, materials, constructional plant and all other things, whether of a temporary or permanent nature, required in and for such execution and maintenance.
- (2) Wherever it is mentioned in the specification/conditions that the contractor shall perform certain work or provide certain facilities, it is understood that the contractor shall do at his own cost and the contract price shall be deemed to have included cost of such performance and provisions, so mentioned, unless otherwise specified elsewhere.
- (3) The contractor shall execute and maintain the works strictly in accordance with the contract to the satisfaction of the Director RGCA and shall comply with and adhere strictly, to the Director RGCA's instructions and directions on any matter whether mentioned in the contract or not, touching or concerning the works. The contractor shall take instructions and directions the Director, RGCA subject to the limitations referred to in clause "Duties and Powers of the Director RGCA"
- (4) The contractor shall also take full responsibility for the adequacy, stability and safety of all site operations and methods of construction.
- (5) The contractor shall give or provide all necessary superintendence during the execution of the works and as long thereafter as the Director RGCA may consider necessary for ;the proper fulfilling of the contractor's obligations under the contract. The contractor shall engage an experienced and qualified Site Manager to be in day-to-day charge of the work. The contractor or his manager whose engagement is subject to approval in writing by the Director RGCA, which approval may at any time be withdrawn, is to be constantly on the works and shall give his whole time the superintendence of the same. If such approval is withdrawn by the engineer in-charge, the contractor shall having regard to the requirement of replacing him as hereinafter mentioned, after receiving written notice of such withdrawal remove the manager from the works and shall not thereafter employ him again on the works in any capacity and shall replace him by another agent approved by the Director RGCA, promptly and positively within a week. Such authorized agent or representative shall receive, on behalf of the contractor, directions and instruction from the Director RGCA or, subject to the limitations of clause "Duties and

Powers of Director RGCA". The Manager or representative of the contractor must be able to speak and communicate in English. The contractor shall during working hours maintain site manager, engineers and supervisors of sufficient training and experience to supervise the various items and operations of the work. Orders and directions given to such manager, engineers, supervisors and/or other staff of the contractor shall be deemed to have been given to the contractor.

- (6) If there is a separate site manager appointed by the contractor for the works, then the contractor shall at least once in a month inspect the works and shall discuss with the Director RGCA, the conduct and progress of the work.
- (7) In the absence of the contractor's designated agent or representative for a particular operation on any site of the works the contractor's supervisory staff or sub-agent or leading hands shall be instructed to receive and carryout any instruction or direction issued by the Director RGCA or the engineer in-charge.
- (8) The contractor shall also perform such other duties and roles as specified elsewhere in this tender document.
- (9) The contractor shall not, otherwise than in accordance with the statutes, ordinances and government regulations or orders for the time being in force, import sell, give barter or otherwise dispose of any alcoholic liquor, or drugs, or arms and ammunition, or permit or suffer any such importation, sale, gift, barter or disposal by his sub-contractors, agents, employees or labour.

2.7. Assignment, Sub-letting and Sub-contracting:

- (1) The contractor shall not assign the contract, either in full or any part thereof, or any benefit or interest therein or there under to any other individual or firm or company, without the prior written consent of the Director RGCA.
- (2) The contractor shall not sublet the whole of the works or any part of the works, except where otherwise provided by the contract, without the prior written consent of the Director RGCA. Such consent, if given, shall not relieve the contractor from any liability or obligation under the contract and he shall be responsible for the acts, defaults and neglects of any sub-contractor, his agents, servants or workmen as fully as if they were acts defaults or neglects of the contractor his agents, servants or workmen.
- (3) Provided always that the provision of labour on a piecework basis shall not be deemed to be a sub-letting under this clause.

- (4) All specialists, merchants, tradesmen and others executing any work or supplying any goods, materials or services for which provisional sums, if any, are included in the contract, who may have been or be nominated or selected approved by the Director RGCA or the engineer in-charge, and all persons to whom by virtue of the provisions of the contract, the contractor is required to sublet any work shall, in the execution of such work or the supply of such goods, materials or services, be deemed to be sub-contractor(s) employed by the contractor and are referred to in this contract as "nominated Sub-Contractors".
- (5) Prior to the engagement of any sub-contractor, the contractor shall submit in writing his proposal to the Director RGCA giving details about the credentials of the sub-contractor on the basis of which the Director RGCA shall consider the nomination of the sub-contractor and inform the contractor accordingly in writing. Only upon receipt of express written approval, the contractor shall engage the nominated sub-contractor for the work.
- (6) The permitted appointment of the sub-contractor shall not establish/entail any contractual relationship between the sub-contractor and the Director RGCA and shall not relieve the contractor of any responsibility under the contract. The activities of a sub-contractor shall be governed by his contract with the contractor, however it is subject to the provisions laid down in the original contract between the Director RGCA and the contractor.

2.8. Standards, Design, Drawing, Specification, Measurement and Variation:

- (1) Standards:
The materials, design and workmanship shall satisfy the applicable relevant Indian standards the job specifications contained herein a codes referred to where the job specifications stipulate requirements in addition to those contained in the standard codes and specifications of the Bureau of Indian Standards, Indian Electricity Act and Rules, Fire Insurance Regulations, Regulations laid down by the Chief Electrical Inspector and State Electricity Board. Regulations laid down by Chief Inspector of Explosives and/or any other regulations laid down by the government or local authorities.
- (2) Materials/Items procured by the Contractor shall be as per the list of approved makes provided in Annexure – 1. Any material/item not listed in the approved list, may be procured with the concurrence of the Engineer in-charge.

(3) The Director RGCA shall have full power and authority to supply to the contractor from time to time during their progress of the works, such drawings and instructions as shall be necessary for the purpose of proper and adequate execution and maintenance of the works. The contractor shall carry out and be bound by the same.

(4) The drawings shall remain in the sole custody of the Director RGCA, but two copies thereof shall be furnished to the contractor free of charge. The contractor shall provide and make at his own expenses any further copies required by him. At the completion of the contract, the contractor shall return to the Director RGCA all drawings provided under the contract.

(5) One copy of the drawings, furnished by the Director RGCA as aforesaid, shall be kept by the contractor on the site and the same shall at all times be available for inspection and use by the Director RGCA or engineer in-charge and by any other person authorized by the Director RGCA.

(6) If, by reason of any failure or inability of the Director RGCA to issue within a time reasonable in all the circumstances any drawings or order requested by the contractor in accordance with sub-clause "Disruption of Progress", the contractor suffers delay then the Director RGCA shall take such delay into account in determining any extension of time to which the contractor is entitled under clause "Extension of Time for Completion".

(7) **Specifications:**
In the case of any class of work for which there is no specification in the tender document, CPWD Specifications and the I.S.S. or in the said specifications forming part of the tender documents or in case there is variation, such work shall be carried out in all respects in accordance with the instructions and requirements of Director RGCA.

(8) **Measurement of quantities:**

- (i) The quantities set out in the schedule of prices are the estimated quantities of the work. But they are not to be taken as the actual and correct quantities of the works to be executed by the contractor in fulfillment of his obligations under the contract.
- (ii) The works shall be measured net, notwithstanding any general or local custom, except where otherwise specifically described or prescribed in the contract.

(9) Works to be measured:

The Director RGCA/ engineer in-charge shall, except as otherwise stated, ascertain and determine by measurement the value in terms of the contract of work done in accordance with the contract. They shall when requires any part /or parts of the works to be measured, give notice to the contractor's authorized agent or representative who shall forthwith attend or send a qualified agent to assist the Director RGCA/ engineer in- charge in making such measurement and shall furnish all particulars, labour, instruments, tapes etc., required for measurement by either of them, should the contractor not attend, or neglect or omit to send such agent, then the measurement made by the Director RGCA/ engineer in- charge shall prepare records and drawings by month of such work and the contractor, as and when called upon to do so in writing, shall within, fourteen days, attend to examine and agree such records and drawings with the engineer in-charge and shall sign the same when agreed. If the contractor does not attend to examine and agree such records and drawings, they shall be taken to be correct. If, after examination of such records and drawings, the contractor does not agree to the same or does not sign the same as agreed, they shall nevertheless be taken to be correct, unless the contractor shall, within fourteen days of such examination, lodge with the engineer in-charge, for decision by the Director RGCA, notice in writing of the respects in which such records and drawings are claimed by him to be incorrect. The Director RGCA's decision shall be final binding and conclusive.

(10) Computerized Measurement Book:

- (i) Engineer in-charge shall, except as otherwise provided, ascertain and determine by measurement, the value of work done in accordance with the contract.
- (ii) All measurement of all items having financial value shall be entered by the contractor and compiled in the shape of computerized measurement books having pages of A-4 size as per the format so that a complete record is obtained of all the items of works performed under the contract.
- (iii) All such measurements and levels recorded by the contractor or his authorized representative from time to time, during the progress of the work, shall be got checked by the contractor from the engineer in-charge or his authorized representative as per interval or programme fixed in consultation with the engineer in- charge or his

authorized representative.

- (iv) After the necessary corrections made by the engineer in-charge, the measurement sheets shall be returned to the contractor for incorporating the corrections and for re submission to the engineer in-charge for the dated signatures by the engineer in-charge and the contractor or their representatives in token of their acceptance.
- (v) Whenever bill is due for payment, the contractor would initially submit draft computerized measurement sheets and these measurements would be got checked/ test checked from the engineer in-charge and/ or his authorized representative. The contractor will, thereafter, incorporate such changes as may be done during these checks/ test checks, in his draft-computerized measurements, and submit a computerized measurement book, duly bound and with its pages machine numbered. The engineer in-charge and/ or his authorized representative would thereafter check this measurement book, and record the necessary certificates for their checks, test checks.
- (vi) The final, fair, computerized measurement book given by the contractor, duly bound, with its pages machine numbered should be 100% correct and no cutting or over-writing in the measurements would thereafter be allowed. If at all any error is noticed, the contractor has to submit a fresh computerized measurement book with its pages duly machine numbered and bound, after getting the early measurement book cancelled. The contractor shall submit three spare copies
- (vii) The contractor shall also submit separately his computerized abstract of cost and the bill based on these measurements, duly bound, and its pages machine numbered along with two spare copies of the bill. The contractor shall, without extra charge, provide all assistance with every appliance, labour and other things necessary for checking of measurements/levels by the engineer in charge or his representative. Except where any general or detailed description of the work expressly shows to the contrary, measurements shall be taken in accordance with the procedure set forth in the specifications notwithstanding any provision in the relevant standard method of measurement or any general local or custom. In the case of any items that are not covered by specifications, measurements shall be taken in accordance with the relevant standard method of measurement issued by the Bureau of Indian Standards and if for

any item no such standard is available then a mutually agreed method shall be followed.

- (viii) Engineer in-charge or his authorized representative may cause either themselves or through another person to check the measurements recorded by the contractor and all provisions stipulated herein above shall be applicable to such checking of measurements or levels.
- (ix) It is also a term of this contract that checking and/ or test checking the measurements of any item of work in the measurement book and/ or its payment in the interim, on account of final bill shall not be considered as conclusive evidence as to the sufficiency of any work or material to which it relates nor shall it relieve the contractor from liabilities from any over measurement or defects noticed till completion of the defect's liability period.

(11) Cement:

- (i) Cement shall be measured by weight and in whole bags each undisturbed and sealed 50 kg bag being considered equivalent to 35 litres (1.2 cft.) in volume. Care should be taken to see that each bag contains the full quantity of cement. When part bag is required cement shall be taken by weight or measured in approved measuring boxes.
- (ii) No make of cement other than the approved by Director RGCA will be allowed to be used on works and the source of supply shall not be changed without approval of Director RGCA in writing. Test Certificates to show that cement is fully complying with the specifications shall be submitted to Director RGCA and notwithstanding this. The Director RGCA may at either discretion, order that the cement brought on site and which they may consider damaged or of doubtful quality or for any reason whatsoever, shall be retested by the contractor at his own cost, in an approved testing laboratory and fresh certificates of its soundness shall be produced. Cement ordered for retesting shall not be used on any work pending results of retest.
- (iii) Cement shall be stored in a weatherproof shed with raised wooden plank or brick flooring to prevent deterioration by dampness or intrusion of foreign material. It shall be so stored as to allow the removal and use of cement in chronological order of receipt, i.e., first procured being first used. Cement deteriorated and/or clotted shall not be used on work but shall be removed at once from the site. Cement stored, though properly, for 3 months or more may

have lost its properties, is liable for retest.

- (iv) Daily record of cement received and consumed shall be maintained by the contractor in a register of approved form and is kept in an accessible place at site available to Director RGCA their representative, for inspection, and extracts thereof shall be submitted to Director RGCA from time to time.

(12) Steel reinforcement:

- (i) The latest edition with up-to-date correction steps shall be adopted in all BIS specification wherever indicated. Chemical and Mechanical properties of steel shall be established by tests.
- (ii) All finished bars shall be free from cracks, surface flaws, lamination's, jagged and imperfect edges. All twisted deformed bars shall be visually examined for pitch length to ensure the strength of individual bars irrespective of test reports.
- (iii) Steel reinforcement shall be stored properly and when stored in open yards shall be free of the ground and if they are to be stored long, shall be protected by a coat of cement which shall be revived if serious discoloration sets in.
- (iv) For the purpose the contractor shall indicate his assumed cost of steel on delivered at site.

HYSD BARS FE 500-TMT as mentioned in Annexure 1 & BOQ
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(13) Figures, Dimensions and Drawings:

Figures, dimensions and drawings shall supersede measurements by scale. Drawings to a large scale shall take precedence over those to a smaller scale.

(14) Plea of custom:

The plea of custom prevailing will not on any account be permitted as an excuse for an infringement of any of the conditions of the contract or specifications.

2.9. Possession of the site:

- (1) Save in so far as the contract may prescribe, the extent of portions of the site of which the contractor is to be given possession from time to time and the order in which such portions shall be made available to him and, subject to any requirement in the contract as to the order in which the works shall be executed, the Director RGCA with the written order to commence the work given to the contractor possession of so much of the site as may be

required to enable the contractor to commence the works, to commence and proceed with the execution of the works in accordance with the programme referred to work description in the BOQ, if any, and otherwise in accordance with such reasonable proposals of the contractor as he shall, by written notice to the Director RGCA make and will, from time to time as the works proceed, give to the contractor possession of such further portions of the site as may be required to enable the contractor to proceed with the execution of the works with due despatch in accordance with the said programme or proposals, as the case may be. If the contractor suffers delay from failure on the part of the Director RGCA to give possession in accordance with the terms of this clause, the Director RGCA shall grant an extension of time for the completion of the works but such delay will not entitle the contractor to damages or any compensation.

(2) Access to the site:

- (i) The contractor shall bear all costs and charges for special or temporary way leaves required by him in connection with access to the site.
- (ii) If approach road is available to the site, contractor will be allowed to use the same. In the event of any damage done to the road by the contractor or his personnel or the supplier to the contractor, the same shall be rectified by the contractor free of cost.
- (iii) Preparing approaches and working area for the movement and operation of cranes, leveling the areas for assembly and erection shall be the responsibility of the contractor.

(3) The Director RGCA shall have the right to take possession for use of any completed or partly completed part of the work. Such possession or use shall not be deemed to be an acceptance of any work not completed in accordance with the contract.

2.10. Execution of work:

- (1) The contractor shall be entirely responsible for executing the work covered under this tender document in a workmanlike and expeditious manner as per the time schedule, specifications, drawings and construction aids such as concrete mix, vibrators, transportation equipment, tools and tackles as well as testing appliances/ machines etc., and the necessary supervisory personnel, skilled, semi-skilled and unskilled labour shall be provided by the contractor to achieve the monthly/ weekly targets and the overall time schedule.

(2) Programme/schedule to be furnished:

- (i) The contractor, within a period of 15 days from the award of contract, shall submit a programme showing the order of procedure how he proposes method statement on all important items of work covering processes equipment, quality controls, well defined to carry out the work within the time period in the tender, to the Director RGCA for their approval.
- (ii) The approved programme shall be followed by the contractor without any reservation. The contractor shall whenever required by the engineer in-charge, also provide in writing for his information a general description of the arrangements and methods which the contractor proposes to adopt for execution of the works.
- (iii) If any time it should appear to the Director RGCA that the actual programme of the works done is not in conformation to the approved programme, the contractor shall produce, within a period of 15 days from the request of the Director RGCA, a revised programme, showing the modifications to the approved programme necessary to ensure completion of the works within the time for completion as defined in clause "Time of Completion & Progress of Work".
- (iv) The submission to and approval by the Director RGCA or engineer in-charge of such programmes or the furnishing of such particulars shall not relieve the contractor of any of his duties or responsibilities under the contract.
- (v) Delays in submission of the original approved programme and the subsequent revised programmes, beyond the stipulated period shall attract penalty as defined in the relevant clause.

(3) Works, if any, is executed as per contractor's own design and drawings, he shall bear the full responsibility for the adequacy and soundness of this design and drawings.

(4) Before the execution of each milestone the contractor should ensure availability of necessary materials at the site for the works related to the milestone. Failing which contractor will not be permitted to start the works relating to the milestone. In such case, the contractor shall be wholly responsible for any delay and related cost and would be liable for penalty towards delay.

(5) Co-ordination with other agencies:

The work shall be carried out in such a manner that the work of other agencies operating at the site is not hampered due to any action of the contractor. The contractor will be responsible for ensuring proper coordination with other agencies. In the event of any dispute between the contractor and any other agency employed at or about the job site arising out of or related to the performance of the work, the decision of the engineer in-charge shall be final and binding on the contractor.

(6) Work during Night, Sunday and Holiday:

- (i) If Director RGCA is satisfied that the work is not likely to be completed in time except by resorting to night work or Sundays and holidays, the contractor shall be required by a special order, to carry out the work even at night or Sundays or holidays, by providing necessary and adequate lighting and refreshment arrangements at his cost. This will, however, not confer any right on the contractor for any claim for any extra payment for introducing such working during night or Sunday or holiday. The decision of the engineer in- charge in this regard will be final and binding on the contractor.
- (ii) Subject to provisions in local Acts and any Statutes of the State, the contractor shall arrange for working at night, on Sundays and holidays, whenever as desired by the Director RGCA to expedite progress and complete the works in time.
- (iii) The contractor shall not be entitled to any additional payment for taking up works at night or on Sundays and holidays. When a work at night has to be carried out, the contractor shall at his own cost and expense, make adequate arrangements for lighting and provide necessary facilities and comply with all stipulations as may be imposed by the Director RGCA/ engineer in-charge. The contractor should be prepared to resort to round the clock working by following shift timings for labour if needed.

(7) Water and Electricity:

- (i) Water for construction purpose has to be arranged by the contractor at his own risk and cost.
- (ii) The contractor has to make his own arrangements for power supply from the competent authority or any other source and further

distribution and shall pay charges at local existing power tariff as applicable at the project site directly to the power supplying agency/ Organization /Institution or any other agencies.

- (iii) All electrical connections carried out by the contractor shall meet the statutory requirements, as applicable from time to time. Changes, if any as incorporated in the statutory rules and regulations from time to time shall be applicable to the electrical connection done by the contractor.
- (iv) All the equipment's/ distribution boxes should have double earthing from the nearest earth pits or from the board earth bus.
- (v) All electrical connections has to be done by a competent licensed electrician with valid license and to the satisfaction of the Director RGCA. During working hours (including over time) one licensed competent electrician shall be available at site to attend to the normal jobs/ emergency jobs. All switch boards/ welding machines shall be kept inside covered sheds to protect them from rain. No inflammable material shall be used for constructing the covered sheds.
- (vi) All electrical equipment's shall be switched off after the job, every day by contractor's authorized electrician. Only metallic distribution boxes with double earthing shall be used at the site. Wooden boxes shall not be allowed. Supply for lighting / grinding shall be taken only using 3 pin plug / socket connectors with interlocking arrangements. Two pin plugs shall not be allowed. Contractor shall submit in time the required forms like schemes, completion reports etc. as specified by Director RGCA to enable energizing the contractor's electrical network.
- (vii) No looping of electrical supply shall be allowed. For all three-phase supplies, only armored aluminium cables of suitable sizes or flexible copper cables of 4 x 6 Sq.mm and above shall be allowed.

2.11. Disruption of work:

- (1) The contractor shall give written notice to the Director RGCA well in time whenever planning or progress of works is likely to be delayed or disrupted if any further drawings or order, including a direction, instruction or approval, is to be issued by the Director RGCA within a reasonable time. The notice shall include details of the drawings or order required and of why and by whom it is required and of any delay or disruption likely to be suffered if it is late.

(2) The contractor shall, on the written/verbal orders of the Director RGCA suspend the progress of the works or any part thereof for such time or times and in such manner as the Director RGCA may consider necessary and shall, during such suspension, properly protect and secure the work so far as is necessary in the opinion of the Director RGCA. The contractor shall not be paid by extra cost for such suspension of the work except that suitable time extension would be granted. If however, such suspension results from any failure of the contractor, the contractor will have to make good any losses that the Director RGCA may incur on this account.

(3) If the progress of the works or any part thereof is suspended on the written orders of the Director RGCA and if permission to resume work is not given by the Director RGCA within a period of ninety days from the date of suspension then, the contractor may serve a written notice on the Director RGCA requiring permission within twenty eight days from the receipt thereof, to proceed with the works of that part thereof in regard in 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 or treat the suspension where it affects part only of the works as an omission of such part under clause "Alterations, Additions and Omissions" where it affects the whole works as an abandonment of the contract by the Director RGCA and contract determined under clause "Valuation at date of forfeiture".

(4) The contractor shall commence the works on site within a period of seven days after the receipt by him of a written order to this effect from the Director RGCA and shall proceed with the same with due expedition and without delay, except as may be expressly sanctioned or ordered by the Director RGCA or be wholly beyond the contractor's control.

(5) Removal of plant on termination:
If the contract shall be terminated under the provisions of the last preceding sub-clause, the contractor shall, with all reasonable despatch, remove from the site all constructional plant and shall give similar facilities to his sub-contractors to do so.

2.12. Completion of work & Defect Liability Period (DLP):

(1) Certification of completion of works:
(i) The contractor shall intimate the Director RGCA in writing the completion of all the works as per the contract. When the whole of

the works is completed in all respects to the full satisfaction of the Director RGCA, he shall determine the date on which the works are considered to have been completed and issue a certificate of completion stating the date on which works are considered to have been completed.

- (ii) The Director RGCA shall determine, from time to time, the date on which any particular section of the work shall have been completed and the contractor shall be bound to observe any such determination by the Director RGCA.
- (2) The contractor, after completion of the whole of the works to the satisfaction of the Director RGCA, shall be bound to handover the works to the Director RGCA.
- (3) Clearance of site:
 - (i) On completion of the works, the contractor shall clear away and remove from the site all constructional plant, surplus materials, rubbish and temporary works of every kind and leave the whole of the site and works clean in a workman like condition to the satisfaction of the Director RGCA. No final payment in settlement of the accounts for the works shall be paid, held to be due or shall be made to the contractor till, in addition to any other condition necessary for such final payment at site clearance shall have been affected by him, and such clearance may be made by the Director RGCA at the expense of the contractor in the event of his failure to comply with this provision within Fifteen (15) days after receiving the notice to that effect.
 - (ii) Should it become necessary for the Director RGCA to have the site cleared at the expense of the contractor, the Director RGCA shall not be held liable for any loss or damage to such of the contractor's property as may be on site and due to such removal there from, which removal may be effected by means of public sale of such materials and property or in such a way as deemed fit and convenient to the Director RGCA.

(4) Defects Liability Period (DLP)

- (i) The Defects Liability Period shall be 01 (One) year or 365 (Three Hundred Sixty Five) Days reckoned from the date of actual completion of full works as per the agreed tender specification, terms & conditions with full satisfaction.
- (ii) The contractor shall be fully responsible for any defects or damages happened within this period such as any damages of the roof sheets & structures and even wear & tear for the other works in this contract agreement. And the same has to rectify by the contractor.

(5) Certificate of final acceptance:

- (i) The contractor's obligation and responsibilities under the contract will be considered satisfied and the completed permanent works accepted when the Director RGCA has issued the certificate of final acceptance to the contractor, after the issue of maintenance certificate.
- (ii) No certificate other than the maintenance certificate referred to in clause "Maintenance Certificate" shall be deemed to constitute approval of the completion of works.

(6) Maintenance certificate:

- (i) As determined in DLP the maintenance period shall be 01 (One) Year or 365 (Three Hundred Sixty Five) Days from the date of the actual completion of full works.
- (ii) The maintenance certificate stating that the works have been completed and maintained to the satisfaction of the Director RGCA shall be issued by him or his authorized representative within twenty-eight days after the expiration of the period of maintenance. This contract shall not be considered as completed until a maintenance certificate has been signed by the Director RGCA and delivered.
- (iii) With regard to defects that may arise during the period of maintenance, the contractor shall be responsible to carry out restoration/ rectification of damages as are attributable to defects in works carried out under this contract to the full satisfaction of the Director RGCA and is subject to clause "Maintenance and Defects" of this contract.
- (iv) Cessation of Director RGCA's liability:
The Director RGCA shall not be liable to contractor for any matter or thing arising out of or in connection with the contract or the execution of the works, unless the contractor shall have made claim in writing in respect thereof before the giving of the maintenance certificate.

2.13. Unfulfilled obligations:

- (1) Notwithstanding the issue of the maintenance certificate to the contractor and subject to sub-clause of this clause, the contractor shall remain liable for the fulfillment of any obligation incurred under the provisions of the contract prior to the issue of the maintenance certificate which remains unperformed at the time such certificate is issued, and for the purpose of determining the nature and extent of any such obligation, the contract shall be deemed to remain in force between the parties hereto.

(2) **Urgent repairs:**

If, by reason of any accident, or failure or other event occurring to in or in connection with the works, or any part thereof, either during the execution of the works, or during the period of maintenance, any remedial or other work or repair or repairs shall, in the opinion of the Director RGCA be urgently necessary for the safety of the works and the contractor is unable or unwilling at once to do such work or repair, the Director RGCA may employ and pay other persons to carry out such works or repair as the Director RGCA may consider necessary, if the work or repair so done by the Director RGCA is work which, in the opinion of the Director RGCA, the contractor was liable to do at his own expense under the contract, all expenses incurred by the Director RGCA in so doing shall be recoverable from the contractor, provided always that the Director RGCA, as the case may be, shall, as soon after the occurrence of any such emergency as may be reasonably practicable, notify the contractor thereof writing.

(3) **Default of contractor:**

If the contractor shall become bankrupt, or have a receiving order made against him, or shall present his petition in for bankruptcy, or shall make an arrangement with or assignment in favour of his creditors, or shall agree to carry out the contract under a committee of inspection of his creditors, or being a corporation, shall go in to liquidation other than a voluntary liquidation for the purpose of amalgamation or reconstruction), or if the contractor shall assign the contract, without the consent in writing of the Director RGCA first obtained, or shall have an execution levied on his goods, or if the Director RGCA shall certify in writing to the Director RGCA that in his opinion the contractor.

- a. Has abandoned the contract; or
- b. Without reasonable excuse has failed to commence the works or has suspended the progress of the works for twenty-eight days after receiving from the Director RGCA written notice to proceed; or
- c. Has failed to remove materials from the site or to pull down and replace work for twenty-eight days after receiving from the Director RGCA written notice that the said materials or work had been condemned and rejected by the Director RGCA under these conditions; or
- d. Despite previous warnings by the Director RGCA, in writings, is not executing the works in accordance with the contract, or in persistently or flagrantly neglecting to carry out his obligations under the contract; or

- e. Has, to the detriment of good workmanship or in defiance of the Director RGCA's instruction to the contrary, sub-let any part of the contract; or
- f. Has failed to adhere to the agreed programme of work by a margin up to 10% (ten percent) of the stipulated period.
- g. Has failed to take steps to employ competent or additional staff and labour as required under contract clause and directed by the engineer in-charge.
- h. Has failed to afford the Director RGCA proper facilities for inspecting the works of any part thereof as required.
- i. Has promised or offered or given any bribe, commission, gift or advantages either himself or through his partner, against or servant to any officer or employee of RGCA or to any person on his or on the behalf in relation to the execution of this or any other contract with RGCA then the Director RGCA may, after giving fourteen days' notice in writing to the contractor, enter upon the site and the works and expel the contractor there from without thereby voiding the contract, or releasing the contractor from any of his obligations or liabilities under the contract, of affecting the rights and powers conferred on the Director RGCA or the engineer in-charge by the contractor and may himself complete the works or may employ any other contractor to complete the works. The completion so much of the constructional plant, temporary works and materials, which have been deemed to be reserved exclusively for the execution of the works, under the provisions of the contract, as he or they may think proper and the Director RGCA may, at any time, sell any of the said constructional plant, temporary works and unused materials and apply the proceeds of sale in or towards the satisfaction of any sums due or which may become due to him from the contractor under the contract.

2.14. Manpower:

- (1) The contractor should not employ men and women below the age of 18 years for the entire works.
- (2) The contractor shall provide highly skilled, skilled, semi-skilled and unskilled labours, Supervisors, Engineers and Manager and employ them on the site in connection with the execution and maintenance of the works.
- (3) Only such technical assistance may be provided as skilled and experience in their respective callings and such sub-agents, foreman and leading hands as are competent to give proper supervision to the work they are

required to supervise, and such skilled, semi-skilled and unskilled labour as necessary for proper and timely execution and maintenance of the works.

- (4) The contractor should as far as possible employ staff from local people who are able to speak the local language. All the staff and labour of the contractor shall be paid in the Indian currency by the contractor.
- (5) The engineer in-charge shall be at his liberty to object to and require the contractor to remove forthwith from the works any person employed by the contractor in or about the execution of maintenance of the works who, in the opinion of the Director RGCA misconducts himself, or is incompetent or negligent in proper performance of his duties, or whose employment is otherwise considered by the Director RGCA to be undesirable and such person shall not be again employed upon the works without the written permission of the Director RGCA. Any person so removed from the works shall be replaced promptly by a competent substitute approved by the Director RGCA.
- (6) The contractor shall make his own arrangements for the engagements of all labour local or otherwise and save in so far as the contractor otherwise provides, for the transport, housing, feeding and payment etc., thereof.
- (7) As far as possible unskilled labour shall be engaged from available local labours.
- (8) The contractor shall provide at his own cost any additional accommodation outside the site required by him/his workers for the purpose of the works.
- (9) The contractor shall in all dealings with labour in his employment have due regard to all recognized festivals, days of rest and religious or other customs.
- (10) The contractor shall in respect of all workmen employed by him in and for the performance of the contract pay rates or wages and observe the conditions of employment not less than those provided under the relevant labour law as applicable to the State.
- (11) The contractor shall at all times take all reasonable precautions to prevent any un-lawful, riotous or disorderly conduct by or amongst his employees and/or labour, and for the preservation of peace and protection of persons and property in the premises/ neighborhood of the works against the same.

(12) In respect of engagement employment, transport, payment, feeding, housing and working conditions of labour and all matters connected therewith, the contractor shall at all times during the continuance of the contract comply in all respects with and carry out all obligations imposed on him by the provisions and requirements of the statutes, along with relevant rules, schemes and/or orders, issued from time to time.

(i) A brief list of important statutes is provided below for reference. The list is only indicative and not exhaustive. The Apprentices Act, 1961; The Contract Labour (Regulation and Abolition) Act, 1970; The Payment of Wages Act, 1936; The Minimum Wages Act, 1948; The Employees Liability Act, 1938; The Industrial Disputes Act, 1947; The Maternity Benefits Act, 1961; The Workman's Compensation Act, 1923; The Employees' Provident Funds and Miscellaneous Provisions Act, 1952; The Employees' State Insurance Act, 1948.

(ii) Other existing national or state statute; ordinance or other law or any regulation, bye-law of any local or other duly constituted authority which may be applicable including any such law, regulation or order that may be passed or ordered and come into force during the validity of the contract.

(13) It is the responsibility of the contractor to adhere to the norms and to make his sub-contractors to adhere to the norms, specified in the statutes or elsewhere at his own cost and shall indemnify the Director RGCA from any non-adherence or delays thereof.

(14) The contractor shall submit at the request of the labour department officials of the state/central government such returns as may be called for from time to time in respect of labour employed by the contractor and by his sub-contractors in the execution of the contract. If so required, the name and address of all sub-contractors shall be furnished by the contractor to the officials.

(15) The contractor shall deliver to the engineer in-charge or at his office return in detail in such form and such intervals as the Director RGCA may prescribe showing the supervisory staff and the numbers of the several classes of labour from time to time employed by the contractor, including sub-contractor, on the site and such information regarding constructional plant as the engineer in-charge may require.

- (16) The contractor will obtain labour license from the respective office/authority as per applicable labour act in force. The same shall have to be produced to engineer in-charge before start of work, as applicable.
- (17) The contractor shall obtain necessary license from the licensing authority under the Contract labour (Regulation and abolition) Act, 1970 and the Central Rules framed there under and produce the same to the engineer in-charge before start of work.
- (18) The provision of EPF & MP Act, 1952 and the Rules/Scheme there under shall be applicable to the contractor and the employees engaged by him for the work. The contractor shall furnish the code number allotted by the RPFC Authority, to the engineer in-charge before commencing the work.
- (19) The contractor shall be exclusively responsible for any delay in commencing the work on account of delay in obtaining a license under Cl.24.1 above or in obtaining the code numbers under Cl.24.2 above and the same shall not constitute a ground for extension of time for any purpose.
- (20) The contractor shall not undertake or execute or permit any other agency or sub-contractor to undertake or execute any work on the contractor's behalf through contract labour except under and in accordance with the license issued in that behalf by the licensing officer or other authority prescribed as applicable.
- (21) The contractor shall enforce the provisions of ESI Act and scheme framed there under with regard to all his employees involved in the performance of the contract, and shall deduct employee's contribution from the wages of each of the employees and shall deposit the same together with Employer's contribution of such total wages payable to the employees in the appropriate account. In the absence of ESI scheme in the relevant area.
- (22) In case of labour unrest/ labour dispute arising out of non-implementation of any law, the responsibility shall solely lie with the contractor and he shall remove/resolve the same satisfactorily at his cost and risk.
- (23) Contractor shall deploy only duly qualified and competent personnel for carrying out the various jobs as assigned by the Engineer from time to time. The workmen deployment by the contractor should also possess the necessary license etc., if required under any law, rules and regulations.

(24) Under the provisions of Employees Provident Funds and Misc. Provision Act 1952, every employee is entitled to and required to become a member of PF from the beginning of the month following that in which he completed three months continuous service or has actually worked for not less than 60 days during the period of three months or less whichever is earlier. The contractor is to fulfil statutory obligations regarding employees Provident Fund.

2.15. Safety Code:

- (1) The contractor shall be responsible for the safety of all workmen and other persons entering or in the works and shall at his own expense and to the approval of the Director RGCA take all measures necessary to ensure their safety.
- (2) The contractor shall at all times, adopt such safe methods of working as well ensure safety of structure, equipments and labour. If at any time, the Director RGCA finds the safety arrangements inadequate or unsafe the contractor shall take immediate corrective actions as directed by the Director RGCA representative at site. Any decision in the matter shall in no way absolve the contractor of his sole responsibility to adopt safe working methods. The contractor is responsible for providing skilled personnel and adequate supervision so as to ensure complete safety.
- (3) All conditions and reference to statutory safety codes and those defined in this tender document are binding on the contractor and are to be implemented at his cost and responsibility.
- (4) The safety codes, standards or procedures as defined in this tender document are indicative and not exhaustive. Any other code, standard, rule or procedure defined elsewhere applied in the normal industrial practice or governed by any law in India in force from time to time, shall also be adhered to by the contractor.
- (5) Working on an elevated structure:
 - (i) Safe means of access shall be provided to all working platforms and other working places. Suitable scaffolds, ladder, helmets, full body harness, fall arresters and/or other safety equipment's should be provided for workmen for all works that cannot safely be done from the ground, or from solid construction except such short period work as can be done safely from ladders.

- (ii) Scaffolding of staging more than 3.6 m (12ft.) above the ground or floor, swung or suspended from an overhead support or erected with stationary support shall have a guard rail properly attached or bolted, braced and otherwise secured at least 90 cm (3ft.) high above the floor or platform of such scaffolding or staging and extending along the entire length of the outside and ends thereof with only such opening as may be necessary for the delivery of materials. Such scaffolding or staging shall be so fastened as to prevent it from swaying from the building or structure.
- (iii) Working platforms, gangways and stairways should be so constructed that they should not sag unduly or unequally, and if the height of the platform or the gangway or the stairway is more than 3.6 m (12ft.) above ground level or floor level, they should be closely boarded, should have adequate width and should be suitably fastened.
- (iv) Every opening in the floor of a building or in a working platform shall be provided with suitable means to prevent the fall of person or materials by providing suitable fencing or railing whose minimum height shall be 90 cm (3ft.).
- (v) When a ladder is used, an extra helper shall be engaged for holding the ladder and if the ladder is used for carrying materials as well, suitable footholds and hand-hold shall be provided on the ladder and the ladder shall be given an inclination not steeper than $\frac{1}{4}$ to 1 ($\frac{1}{4}$ horizontal and 1 vertical).
- (vi) Every ladder shall be securely fixed. No portable single ladder shall be over 9m (30ft.) in length while the width between side rails in rung ladder shall in no case be less than 29 cm (11 $\frac{1}{2}$ ") for ladder up-to and including 3 m (10 ft.) in length. For longer ladders, this width should be increased at least $\frac{1}{4}$ " for each additional 30 cm (1 foot) of length. Uniform step spacing of not more than 30 cm shall be kept.
- (vii) All scaffolds, ladders and other safety devices mentioned or described herein shall be maintained in safe condition and no scaffold, ladder or equipment shall be altered or removed while it is in use. Adequate washing facilities should be provided at or near places of work.

(6) Excavation and Trenching:

- (i) Shoring required for deep excavation must be adequate and rigidly braced and struttured.
- (ii) All trenches 1.2 m (4ft.) or more in depth, shall at all times be supplied with at least one ladder for each 30 m (100 ft.) in length or fraction thereof. Ladder shall extend from bottom of the trench to at least 90 cm (3ft.) above the surface of the ground. The side of the trenches which are 1.5 m (5ft.) or more in depth shall be stepped back to give suitable slope or securely held by timber bracing, so as to avoid the danger of sides collapsing. The excavated materials shall not be placed within 1.5 m (5ft.) of the edges of the trench or half of the depth of the trench whichever is more. Cutting shall be done from top to bottom. Under no circumstances, undermining or undercutting shall be done.

(7) Bore holes/wells:

- (i) If the bore well is successful, it should be safely capped to avoid caving and collapse of the bore well. The failed and the abandoned ones should be completely refilled to avoid caving and collapse.
- (ii) During drilling, sign boards should be erected near the site with the address of the drilling contractor and the engineer in-charge of the work.
- (iii) Suitable fencing should be erected around the well during the drilling and after the installation of the rig on the point of drilling, flags shall be put 50m all-round the point of drilling to avoid entry of people.
- (iv) After drilling the bore well, a cement platform (0.50m x 0.50m x 1.20m) 0.60m above ground level and 0.60m below ground level should be constructed around the well casing.
- (v) After the completion of the bore well, the contractor should cap the bore well properly by welding steel plate, cover the bore well with the drilled wet soil and fix thorny shrubs over the soil. This should be done even while repairing the pump.

After the bore well is drilled the entire site should be brought to the ground level.

(8) Demolition:

Before any demolition work is commenced and also during the progress of the work,

(i) all roads and open areas adjacent to the work site shall either be closed or suitably protected.

(ii) No electric cable or apparatus which is liable to be a source of danger or a cable or apparatus used by the operator shall remain electrically charged.

(9) Working in Sewers & Manholes:

When workers are employed in sewers and manholes, which are in active use, the contractor shall ensure that the manhole covers are opened and ventilated at least for an hour before the workers are allowed to get into the manholes, and the manholes so opened shall be cordoned off with suitable railing and provided with warning signals or boards to prevent accident to the public. In addition, the contractor shall ensure that the following safety measure are adhered to:

(i) Entry for workers into the line shall not be allowed except under supervision of the engineer in-charge or any other higher officer.

(ii) At least 5 to 6 manholes upstream and downstream should be kept open for at least 2 to 3 hours before any man is allowed to enter the manhole for working inside.

(iii) Before entry, presence of toxic gases should be tested by inserting wet lead acetate paper which changes colour in the presence of such gases and gives indication of their presence.

(iv) Presence of Oxygen should be verified by lowering a detector lamp into the manhole. In case, no Oxygen is found inside the sewer line, workers should be sent only with Oxygen kit.

(v) Safety belt with rope should be provided to the workers. While working inside the manholes, such rope should be handled by two men standing outside to enable him to be pulled out during emergency.

(vi) The area should be barricaded or cordoned off by suitable means to avoid mishaps of any kind. Proper warning signs should be displayed for the safety of the public whenever cleaning works are undertaken during night or day.

- (vii) No smoking or open flames shall be allowed near the blocked manhole being cleaned.
- (viii) The malba obtained on account of cleaning of blocked manholes and sewer lines should be immediately removed to avoid accidents on account of slippery nature of the malba.
- (ix) Workers should not be allowed to work inside the manhole continuously. He should be given rest intermittently. The engineer in-charge shall decide the time up to which a worker may be allowed to work continuously inside the manhole.
- (x) Gas masks with Oxygen cylinder should be kept at site for use in emergency.
- (xi) Air-blowers should be used for flow of fresh air through the manholes. Whenever called for, portable air blowers are recommended for ventilating the manholes. The motors for these shall be vapor proof and of totally enclosed type. Non sparking gas engines also could be used but they should be placed at least 2 meters away from the opening and on the leeward side protected from wind so that they will not be a source of friction on any inflammable gas that might be present.
- (xii) The workers engaged for cleaning the manholes/sewers should be properly trained before allowing to work in the manhole.
- (xiii) The workers shall be provided with gumboots or non-sparking shoes, bump helmets and gloves, non-sparking tools, safety lights, gas masks and portable air blowers (when necessary). They must be supplied with barrier cream for anointing the limbs before working inside the sewer lines.
- (xiv) Workmen descending a manhole shall try each ladder stop or rung carefully before putting his full weight on it to guard against insecure fastening due to corrosion of the rung fixed to manhole well.
- (xv) If a man has received a physical injury, he should be brought out of the sewer immediately and adequate medical aid should be provided to him.

(xvi) The extent to which these precautions are to be taken depend on individual situation but the decision of the engineer in-charge regarding the steps to be taken in this regard in an individual case will be final.

(10) Painting:

The contractor shall not employ men and women below the age of 18 years on the work of painting with products containing lead in any form. Wherever men above the age of 18 are employed on the work of lead painting, the following precaution should be taken.

- (i) No paint containing lead or lead products shall be used except in the form of paste or ready-made paint.
- (ii) Suitable face masks should be supplied for use by the workers when paint is applied in the form of spray or a surface having lead paint is dry rubbed and scrapped.
- (iii) Overalls shall be supplied by the contractors to the workmen and adequate facilities shall be provided to enable the working painters to wash during and on the cessation of work.
- (iv) Measures shall be taken, wherever practicable, to prevent danger arising out of from dust caused by dry rubbing down and scraping.
- (v) Adequate facilities shall be provided to enable working painters to wash during and on cessation of work.
- (vi) Overall, shall be worn by working painters during the whole of working period.
- (vii) Suitable arrangement shall be made to prevent clothing put off during working hours being spoiled by painting materials.
- (viii) Instructions with regard to special hygienic precautions to be taken in the painting trade shall be distributed to working painters.

(11) Hoist:

Use of hoisting machines and tackle including their attachments, anchorage and supports shall conform to the following standards or conditions.

- (i) These shall be of good mechanical construction, sound materials and adequate strength and free from patent defects and shall be kept repaired and in good working order.
- (ii) Every rope used in hoisting or lowering materials or as a means of suspension shall be of durable quality and adequate strength, and free from patent defects.
- (iii) Every crane driver or hoisting appliance operator, shall be properly qualified and no person under the age of 21 years should be in charge of any hoisting machine including any scaffolding winch or give signals to operator.
- (iv) In case of every hoisting machine and of every chain ring hook, shackle swivel and pulley block used in hoisting or as means of suspension, the safe working load shall be ascertained by adequate means. Every hoisting machine and all gear referred to above shall be plainly marked with the safe working load. In case of a hoisting machine having a variable safe working load each safe working load and the condition under which it is applicable shall be clearly indicated. No part of any machine or any gear referred to above in this paragraph shall be loaded beyond the safe working load except for the purpose of testing.
- (v) In case of departmental machines, the safe working load shall be notified by the engineer in-charge. As regards contractor's machines the contractors shall notify the safe working load of the machine to the engineer in-charge whenever he brings any machinery to site of work and get it verified by the engineer in-charge concerned.
- (vi) Motors, gearing, transmission, electric wiring and other dangerous parts of hoisting appliances should be provided with efficient safeguards. Hoisting appliances should be provided with such means as will reduce to the minimum the risk of accidental descent of the load. Adequate precautions should be taken to reduce to the minimum the risk of any part of a suspended load becoming accidentally displaced.

(12) Flood, Fire and Explosion:

- (i) When the work is done near any place where there is risk of drowning, all necessary equipments should be provided and kept ready for use and all necessary steps taken for prompt rescue of any person in danger and adequate provision, should be made for prompt first aid treatment of all injuries likely to be obtained during the course of the work.
- (ii) All practical steps shall be taken to prevent danger to persons employed from risk of fire or explosion or flooding. No floor, roof or other part of the building shall be so overloaded with debris or materials as to render it unsafe

(13) Electrical Safety:

- (i) Adequate precautions shall be taken to prevent danger from electrical equipment. No materials on any of the sites or work shall be so stacked or placed as to cause danger or inconvenience to any person or the public.
- (ii) The contractor shall provide all necessary fencing and lights to protect the public from accident and shall be bound to bear the expenses of defense of every suit, action or other proceedings at law that may be brought by any person for injury sustained owing to neglect of the above precautions and to pay any damages and cost which may be awarded in any such suit; action or proceedings to any such person or which may, with the consent of the contractor, be paid to compensate any claim by any such person.
- (iii) When workers are employed on electrical installations which are already energized, insulating mats, wearing apparel, such as gloves, sleeves and boots as may be necessary should be provided. The worker should not wear any rings, watches and carry keys or other materials which are good conductors of electricity.

(14) Safety Equipment:

All necessary personal safety equipment as considered adequate by the Engineer in-charge should be kept available for the use of the person employed on the site and maintained in a condition suitable for immediate use, and the contractor should take adequate steps to ensure proper use of equipment by those concerned. The following safety equipment shall invariably be provided:

- (i) Workers employed on mixing asphaltic materials, cement and lime mortars shall be provided with protective footwear and protective goggles.
- (ii) Those engaged in white washing and mixing or stacking of cement bags or any material which is injurious to the eyes, shall be provided with protective goggles.
- (iii) Those engaged in welding works shall be provided with welder's protective eye shields.
- (iv) Stone breaker shall be provided with protective goggles and protective clothing and seated at sufficiently safe intervals.
- (v) Contractor shall provide all safety equipment specified in this safety code or elsewhere.

(15) Housekeeping:

- (i) The contractor shall keep clean the work site from time to time to the satisfaction of the engineer in-charge for easy access to work site and to ensure safe passage, movement and working, at his cost.
- (ii) If the work involves dismantling any existing structure in whole or part, care shall be taken to limit the dismantling up to the exact point and/or lines as directed by the engineer in-charge and any damage caused to the existing structure beyond the said line or point shall be repaired and restored to the original at the contractor's cost and risks to the satisfaction of the engineer in- charge, whose decision shall be final and binding upon the contractor.
- (iii) The contractor shall be custodian of the dismantled materials till the engineer in-charge takes charge thereof.
- (iv) The contractor shall dispose off the unserviceable materials, details etc., to any area within RGCA's premises as decided by the engineer in-charge.
- (v) The contractor shall sort out, clear and stack the serviceable materials obtained from the dismantling/ renewal at places as directed by the engineer in-charge.

- (16) Display safety provisions should be brought to the notice of all concerned by display on a notice board at a prominent place at work spot. The person responsible for compliance of the safety code shall be named therein by the contractor.
- (17) Other safety measures that the Director RGCA or the engineer in-charge may direct, depending on the exigencies of the location and nature of work and other relevant factors, shall be provided by the contractor at no extra cost.
- (18) To ensure effective enforcement of the rules and regulations relating to safety precautions the arrangements made by the contractor shall be open to inspection by the labour officer or engineer in-charge of the department or their representatives.
- (19) Notwithstanding the safety codes stated in this tender document, there is nothing in these to exempt the contractor from the operations of any other Act or Rule in force in the Republic of India.

2.16. Health and Sanitary:

- (1) The contractor at his cost and responsibility shall,
 - (i) With respect to all buildings and construction works in which twenty or more workers are ordinarily employed or are proposed to be employed in any day during the period during which the contract work is in progress, make all health and sanitary arrangement mandatorily.
 - (ii) With respect to all buildings and construction works in which less than twenty workers are ordinarily employed or are proposed to be employed in any day during the period during which the contract work is in progress, make health and sanitary arrangement as per the directions of the engineer in-charge.
- (2) Drinking water:
 - a) The contractor shall, having regard to local conditions, provide on the site to the satisfaction of the engineer in-charge, an adequate supply of drinking and other water for the use of the contractor's staff and work people at his own cost.

- b) In every work place, there shall be provided and maintained at suitable places, easily accessible to labour, a sufficient supply of potable water for drinking.
- c) Where drinking water is obtained from an intermittent public water supply, each work place shall be provided with storage where such drinking water shall be stored.
- d) Every water supply or storage shall be at a distance of not less than 50 feet from any latrine drain or other source of pollution. Where water has to be drawn from an existing well which is within such proximity of latrine, drain or any other source of pollution, the well shall be properly chlorinated before water is drawn from it for drinking. All such wells shall be entirely closed in and be provided with a trap door which shall be dust and waterproof.
- e) A reliable pump shall be fitted to each covered well, the trap door shall be kept locked and opened only for cleaning or inspection which shall be done at least once a month.

(3) Latrines and Urinals:

- (i) Latrines shall be provided in every work place on the following scale namely:
 - a. Where female are employed, there shall be at least one latrine for every 25 female. Where male are employed, there shall be at least one latrine for every 25 male.
 - b. Provided that, where the number of male or female workmen exceeds 100, it shall be sufficient if there is one latrine for 25 male or female, as the case may be up to the first 100, and one for every 50 or part thereafter.
 - c. Provided that where the number of male or female workmen, exceeds 500, it shall be sufficient if there is one urinal for every 50 male or female, as the case may be up-to the first 500 and one for every 100 or part thereafter.
- (ii) Where workers of both sexes are employed, there shall be displayed outside each block of latrine and urinal, a notice in the language understood by the majority of the workers "For Men only" or "For Women Only" as the case may be. The notice shall also bear the figure of a man or of a woman, as the case may be.

- (iii) Every latrine shall be under cover and so partitioned off as to secure privacy and shall have a proper door and fastenings.
- (iv) The latrines and urinals shall be adequately lighted and shall be maintained in a clean and sanitary condition at all times.
- (v) Water shall be provided by means of tap or otherwise so as to be conveniently accessible in or near the latrines and urinals. Latrines and urinals other than those connected with a flush sewage system shall comply with the requirements of the Public Health Authorities.
- (vi) Disposal of excreta: Unless otherwise arranged for by the local sanitary authority, arrangements for proper disposal of excreta by incineration at the work place shall be made by means of a suitable incinerator. Alternately excreta may be disposed of by putting a layer of night soil at the bottom of a pucca tank prepared for the purpose and covering it with a 15 cm. layer of waste or refuse and then covering it with a layer of earth for a fortnight (when it will turn to manure) or any other method as directed by the competent government authority.
- (vii) The contractor shall at his own expense, carry out all instructions issued to him by the engineer in-charge to effect proper disposal of night soil and other conservancy work in respect of the contractor's workmen or employees on the site. The contractor shall be responsible for payment of any charges which may be levied by the Public Health Authorities for execution of such work on his behalf.

(4) Provision of shelter during rest:

- (i) At every place there shall be provided, free of cost, four suitable sheds, two for meals and the other two for rest separately for the use of men and women labour. The height of each shelter shall not be less than 3 metres (10 ft.) from the floor level to the lowest part of the roof. These shall be kept clean and the space provided shall be on the basis of 0.6 sq.m. (6 sft) per head.
- (ii) Provided that the engineer in-charge may permit subject to his satisfaction, a portion of the building under construction or other alternative accommodation to be used for the purpose.

(5) Spread of Disease:

- (i) The contractor shall at his own expense, conform to all anti-malarial like Dengue, Insect bites, Corona precautions etc. instructions given to him by the engineer in-charge including the filling up of any borrow pits which may have been dug by him.
- (ii) In the event of any outbreak of illness of an epidemic / pandemic nature, the contractor shall comply with and carry out such regulations, orders and requirements as may be made by the government, or the local medical or sanitary authorities for the purpose of dealing with and overcoming the same.
- (iii) Covid 19 protocols should be strictly followed by the contractor during construction work. Contractor shall be fully responsible for non-adherence of the protocols by his representatives or workmen.
- (iv) Government may, from time to time, add to or amend these rules and issue directions, it may consider necessary for the purpose of removing any difficulty which may arise in the administration thereof. Directions of the Government, issued from time to time, relating to any disease outbreak or threat may be adhered too.

2.17. First Aid, Medical Attendance and Accident:

- (1) The contractor shall arrange for medical attention to be promptly available when necessary. He shall for his purpose provide a number of First-Aid stations at suitable locations within easy reach of the workmen and other staff engaged in the works. Each first aid station shall be properly equipped and will remain in charge of a suitable qualified person. The contractor shall also provide for transport of serious cases to the nearest hospital. All these arrangements shall be to the approval of the Director RGCA and nothing is payable on this ground.
- (2) At every work place, there shall be provided and maintained, so as to be easily accessible during working hours, first-aid boxes at the rate of not less than one box for 150 contract labour or part thereof ordinarily employed.
- (3) The first-aid box shall be distinctly marked with a red cross on white back

ground and,

- (i) For work places in which the number of contract labour employed does not exceed 50, each first-aid box shall contain the following equipment:
 - (a) 6 small sterilized dressings.
 - (b) 3 medium size sterilized dressings.
 - (c) 3 large size sterilized dressings.
 - (d) 3 large sterilized burn dressings.
 - (e) 1 (30 ml.) bottle containing a two per cent alcoholic solution of iodine.
 - (f) 1 (30 ml.) bottle containing Sal volatile having the dose and mode of administration indicated on the label.
 - (g) 1 snakebite lancet.
 - (h) 1 (30 gms.) bottle of potassium permanganate crystals.
 - (i) 1 pair scissors.
 - (j) 1 copy of the first-aid leaflet issued by the Director General, Factory Advice Service and Labour Institutes, Government of India.
 - (k) 1 bottle containing 100 tablets (each of 5 gms.) of aspirin.
 - (l) Ointment for burns.
 - (m) A bottle of suitable surgical antiseptic solution
- (ii) For work places in which the number of contract labour exceed 50, each first-aid box shall contain the following equipment:
 - (a) 12 small sterilized dressings.
 - (b) 6 medium size sterilized dressings.
 - (c) 6 large size sterilized dressings.
 - (d) 6 large size sterilized burn dressings.
 - (e) 6 (15 gms.) packets sterilized cotton wool.
 - (f) 1 (60 ml.) bottle containing a two per cent alcoholic solution iodine.
 - (g) 1 (60 ml.) bottle containing Sal volatile having the dose and mode of administration indicated on the label.
 - (h) 1 roll of adhesive plaster.
 - (i) 1 snake bite lancet.
 - (j) 1 (30 gms.) bottle of potassium permanganate crystals.
 - (k) 1 pair scissors.
 - (l) 1 copy of the first-aid leaflet issued by the Director General Factory Advice Service and Labour Institutes /Government of India.

- (m) A bottle containing 100 tablets (each of 5 gms.) of aspirin.
- (n) Ointment for burns.
- (o) A bottle of suitable surgical antiseptic solution.

(iii) Adequate arrangements shall be made for immediate recoupment of the equipment items when necessary.

(iv) Nothing except the prescribed contents shall be kept in the First-aid box.

(4) Responsibility of the contractor (along with cost): The first-aid box shall be kept in charge of a responsible person who shall always be readily available during the working hours of the work place.

- (i) A person in charge of the first-aid box shall be a person trained in First-aid treatment in the work places where the number of contract labour employed is 150 or more.
- (ii) In work places where the number of contract labour employed is 500 or more and hospital facilities are not available within easy distance from the works. First-aid posts shall be established and run by a trained compounder. The compounder shall be on duty and shall be available at all hours when the workers are at work.
- (iii) Where work places are situated in places which are not towns or cities, a suitable motor transport shall be kept readily available to carry injured person or person suddenly taken ill to the nearest hospital.

(5) The contractor shall provide, to the satisfaction of the government or local authorities concerned, adequate medical attendance for his employees and labour at his own cost.

(6) The contractor shall within twenty-four (24) hours of the occurrence of any accident at or about the site or in connection with the execution of the works, report such as accident to the Director RGCA and shall make every arrangement to render all possible assistance. The contractor shall also report such accident to the competent authority whenever such a report is required by law.

(7) The Director RGCA shall not be liable for any damage or compensation payable at law in respect or in consequence of any accident or injury to any workmen or other person in the employment of the contractor or sub-contractor.

2.18. Force Majeure:

- (1) The conditions of Force Majeure are war, hostilities (whether war be declared or not) invasion, act of foreign enemies, rebellion, revolution, insurrection or military or usurped power, civil war, or unless solely restricted to employees of the contractor or his sub-contractors and arising from the conduct of works, riot, commotion or disorder, use or occupation by the Director RGCA of any part of the permanent works, or a cause solely due to RGCA's design of the works, or ionizing radiations or contamination by radio-activity from any nuclear fuel or from any nuclear waste from the combustion of nuclear fuel, radioactive toxic explosive or other hazardous properties of any explosive, nuclear component thereof, pressure waves caused by aircraft or other aerial devices, traveling of sonic or supersonic speeds of any such operation of the forces of nature as an experience contractor could not foresee, or reasonably make provision for or insure against all of which are herein collectively referred to as "the Force Majeure".
- (2) Notwithstanding anything in the contract contained, the contractor shall be under no liability whatsoever whether by way of indemnify or otherwise for or in respect of destruction of or damages to the works, save to work condemned under the provisions of clause "Removal of proper work and Materials" and "Department of Contract in Complain" in prior to the occurrence of any Force Majeure hereinafter mentioned, or to property whether of RGCA or third parties, or for or in respect of injury or loan of life which is the consequence of any Force Majeure defined.
- (3) Destruction, damage, injury or loss of life caused by the explosion or impact whenever and wherever occurring of any mines, bomb, shell, grenade, or other projectile, missile, ammunition, or explosive of war, shall be deemed to be a consequence of the said Force Majeure.
- (4) If, during, the currency of the contract, there shall be an outbreak of war, whether war is declared or not, which, whether financially or otherwise, materially affects the execution of the works, the contractor shall, unless and until the contract is terminated by the provisions of this clause, continue to use his best endeavors to complete the execution of the works. Provided always that the Director RGCA shall be entitled at any time after such outbreak of war to terminate the contract by giving written notice to the contractor and, upon such notice being given, this contract shall,

except as to the rights of the parties under this clause and to the operation of Clause "Settlement of Disputes", terminate but without prejudice to the rights of either party in respect of any antecedent breach thereof.

2.19. Insurance:

- (1) Without limiting his obligations and responsibilities thereof, the contractor shall insure in the name of the Director RGCA and the contractor against all loss or damage from whatever cause arising, other than the Force Majeures, for which he is responsible under the terms of the contract and in such manner that the Director RGCA and contractor are covered for the period stipulated, thereof and are also covered during the period of maintenance for loss or damage arising from a cost occurring prior to the commencement if periods of maintenance and for any loss or damage occasioned by the contractor.
- (2) The contractor shall avail "Group Personal Accident Insurance Policy" covering all the personnel employed for execution for works complying requirement of Workmen Compensation Act 1923 as amended by Amendment Act No. 65 of 1976 for the entire period of contract and extended period, if any, be produced to the engineer in-charge before start of work.
- (3) In the course of any operations carried out by him for the purpose of complying with his obligations, the works for the time being executed to the estimated current contract value thereof together with the materials for incorporation of the works at their replacement value.
- (4) The constructional plant and other things brought on to the site by the contractor to the replacement value of such constructional plant and other things. These shall include materials belonging to the Director RGCA but issued to or intended to be issued to the contractor for use in the works.
- (5) Before commencing the execution of the works the contractor, but without limiting his obligations and responsibilities thereof, shall insure against his liability for any material or physical damage, loss or injury which may occur to any property, including that of the Director RGCA, or to any person, including any employee of RGCA by or arising out of the execution of the works or in the carrying out of the contract.

- (6) The contractor shall insure against such liability with an insurer approved by the Director RGCA, which approval shall not be unreasonably withheld, and shall continue such insurance during, the whole of the time that any person is employed by his on the whole works. Provided always that, in respect of any person employed by any sub-contractor, the contractor's obligation to insure the aforesaid under this sub-clause shall be satisfied if the sub-contractor shall have insured against the liability in respect of such persons in such manner that the Director RGCA is indemnified under the policy.
- (7) The terms of such insurance policy shall include a provision whereby in the event of any claim in respect of which the contractor would be entitled to receive indemnity under the policy being brought or made against the Director RGCA, the insurer will indemnify the Director RGCA against such claims and any costs, charges and expenses in respect thereof.
- (8) The insurances referred thereof shall be effected with an insurer and in terms approved by the Director RGCA, which approval shall not be unreasonably withheld, entirely at the cost and expense of the contractor. The contractor shall, whenever required, produce to the Director RGCA or the engineer in-charge, the policy or policies and the receipts for payment of the current premium.
- (9) It shall be the duty of the contractor to notify the insurers under any of the insurance thereof any matter or count which by the terms of such insurances are required to be notified.

2.20. Indemnity:

- (1) The contractor shall indemnify and save harmless the Director RGCA from and against all actions, suits, proceedings, losses costs, damages, charges, claims and demands of every nature and description brought or recovered against the Director RGCA by reason of any act or omission of the contractor, his agents or employees. In the execution of the works or in guarding of the same. All sums payable by way of compensation under any of these conditions shall be considered as reasonable compensation to be applied to the use of the Director RGCA without reference to the actual loss or damage sustained and whether or not any damage shall have been sustained.

- (2) The contractor shall indemnify and keep indemnified the Director RGCA against all damages and compensation and against all claims, proceedings, costs, charges and expenses whatsoever in respect thereof or in relation thereto any accident or injury to any workmen or other person in the employment of the contractor or sub-contractor.
- (3) The contractor shall indemnify and keep indemnified the Director RGCA or the engineer in-charge or their representatives, against all losses, claims, demands, proceedings, costs, charges and expenses whatsoever arising out of or resulting from any default by the contractor in notifying the insurer as per the clauses in the respective insurance policy, whether as a result of the avoidance of such insurance or otherwise.
- (4) No personal liability shall be imposed on the members or the staff of RGCA or on the engineer in-charge or their duly authorized representatives, agents or employees for acts performed or discharged in the exercise of their authorized duties or responsibilities or in the carrying out of their obligations by virtue of the provisions or scope of work contained in the contract, it being understood that they are acting solely as agents and representatives of the Director RGCA.

2.21. Construction records:

- (1) The contractor shall keep and supply to the engineer in-charge the updated records of the dimensions and positions of all permanent works (showing therein any approved deviation between drawing and the work as actually executed). The information available from the records must be adequate and complete to enable preparation of 'as-built' drawings.
- (2) The contractor shall maintain at site daily records of progress with regard to the works carried out, labour engaged and construction equipment deployed. These will form the basis of preparing periodic reports and returns as may be required by the Director RGCA and in the manner as directed by him. These daily records shall be made accessible to the Director RGCA and engineer in-charge as and when desired.
- (3) Site order books:
 - (i) For the purpose for quick communication from the Director RGCA or engineer in-charge to the contractor or his agent or representatives, site order books shall be maintained by the contractor at site in the manner described below.

- (ii) Any communication relating the works may be conveyed through records in the site order books. Such a communication from the Director RGCA or engineer in-charge to the contractor shall be deemed to have been adequately served in terms of sub-clause (i) of clause "Notice" hereof. Each site order book shall have machine-numbered pages in triplicate and shall be carefully maintained and preserved.
- (iii) The contractor shall keep site order books at various places where work is being carried out so as to be readily available in the Director RGCA or engineer in-charge. Any construction or order which the Director RGCA or engineer in-charge may like to issue to the contractor may be recorded in the site order Book and two copies thereof taken for Director RGCA's record.
- (iv) The engineer in-charge may also maintain such site order books for recording any instruction which the engineer in-charge or Director RGCA themselves may like to communicate to the contractor or his agent or representative. One copy thereof when transmitted to the contractor's agent or representative under proper acknowledgement shall constitute adequate service thereof to the contractor.
- (v) The site order books are intended primarily for facility of quick but recorded communication between persons working at site on behalf of the two parties. All-important communications between the engineer in-charge or the Director RGCA and the contractor or his agent shall be through letters and not through site order books.

3. Special Conditions of the Contract

3.1. Instructions to Bidder (ITB) shall form apart of special conditions of contract.

- As the displayed BOQ rates are derived from the Delhi Schedule of Rates (DSR) 2022 and 2023, adjusted with the applicable Cost Index, bidders are advised to check and verify the hike in cost index for the particular region (Nagercoil) for DSR-based rates before quoting their percentage.
- The Market Rates shown are based on enquiries conducted with authorized dealers and contractors for specific materials.
- Any discrepancies or variations should be accounted for by the bidder in their percentage to ensure accuracy and competitiveness

3.2. Sufficiency of Tender and Submission of Bid:-

- (1) The bidder may participate in the tender if he intends to complete all the works

detailed in the scope of works within the time period as specified in this tender document. The bidder shall bear all expenses in connection with the preparation and submission of his bid.

- (2) The bidder shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his bid for the works and of the rates and prices quoted in the schedule of prices, which tender rates and prices shall, except in so far and it is otherwise provided in the contract, cover all his obligations under the contract and all matters and things necessary for the proper execution and maintenance of the works.
- (3) The bidder must obtain for himself on his own responsibility and at his own expense all the information necessary including risks, contingencies and other circumstances to enable him to make a proper tender and to enter into a contract with the Director RGCA; he must examine the drawings, specifications, conditions and so on and must inspect the site of work, examine the nature of the ground and the subsoil (so far as is practicable), and acquaint himself with local conditions, means of access to the work, the nature of the work, in fact all matters pertaining thereto before he submits his tender.
- (4) The bidder will have to MANDATORILY inspect the site, before participating in tender and ascertain all the necessary information, including the risks, contingencies, nature of ground, place of supply, unloading & installation etc., and also acquaint himself with the local conditions. As proof of visit the bidder shall duly fill the relevant declaration form as per the format provided in Form-3.
- (5) It shall be deemed that the bidder has inspected and examined the site and its surroundings and information available in this connection therewith and to have satisfied himself, before submitting his tender as to the form and nature thereof, including the sub-surface conditions, the hydrological and climate conditions, the extent and nature of work and materials necessary for the completion of the works, the means of access to the site and the accommodation he may require and, in general, shall be deemed to have obtained all necessary information, subject as above mentioned, as to risks contingencies and all other circumstances which may influence or affect his tender.
- (6) The Director RGCA shall have made available to the contractor with the tender

documents such data on sub-surface conditions as shall have been obtained by or on behalf of the Director RGCA from investigations undertaken relevant to the works and the tender shall be deemed to have been based on such data, but the contractor shall be responsible for his own interpretation thereof.

- (7) The rate quoted for the work in the tender, shall be inclusive of all incidentals, hiring of all necessary equipment, transportation, insurance, testing, fabrication, erection at site, and expenses of staff/labour connected with the work. Nothing other than the quoted rates shall be entertained under any circumstances.
- (8) The rate quoted for the work in the tender, shall be inclusive of all taxes, including GST, charges relating to import & customs clearance, or any other statutory payments relating to the supply of material to the project site. Nothing other than the quoted rates shall be entertained under any circumstances.
- (9) The entire work covered in this tender document shall be treated as works contract. Bidder should quote for this work accordingly. The quoted price should include all taxes, duties, octroi, excise, freight etc., whatsoever.
- (10) A bidder shall submit his online bid in the Central Public Procurement (CPP) portal (<http://eprocure.gov.in/eprocure/app>) of the Government of India, on or before the last date for submission of bid specified in the Bid Data. No other form of bid will be considered for evaluation.
- (11) It is the responsibility of the bidder to fulfill the terms & conditions prevailing in the CPP portal. CPP portal is an e-procurement portal of the Government of India and the Director RGCA has no control over the portal. Hence, the Director RGCA, at any point of time, is not responsible for any technical issues or difficulties arising out of, and/or loss or damage incurred due to the usage of the CPP portal.
- (12) Any corrigendum, subsequent amendments and/or extension of date, if any, for submission of bids shall be posted on the aforesaid portal only. Hence, bidders are advised to visit the portal regularly.
- (13) The currency for the bid shall be Indian National Rupee (INR) only.
- (14) Bids shall be valid for a period specified in the Bid Data.
- (15) Bidder shall digitally sign and upload the required bid documents, one by

one in the CPP portal.

- (16) The quantities furnished in the bill of quantities are only probable quantities are liable to alteration by omission, deduction or addition, and it should be clearly understood that the contract is not a lump sum contract and the Director RGCA do not, in any way, assure the bidder that the said probable quantities are correct or that the work would correspond thereto. Payments will be regulated on the actual quantities of work done at the accepted rates. No escalation will be entertained on any part in this regard.
- (17) The drawings, specifications and the bill of quantities, forming parts of the Contract, are explanatory of and are complementary to one another, representing together the works / installations to be carried out.
 - (i) If neither the drawings nor the specifications nor the accepted bill of quantities include any part / parts the intention to include which is nevertheless clearly to be inferred and which are obviously necessary for the proper completion of the works / installations, all such parts shall be supplied and executed by the Contractor at no extra charge.
 - (ii) Anything contained in one or another of (a) the drawings, (b) the specifications and (c) the accepted bill of quantities are not found in the others will be equally binding as if contained in each of them.
- (18) The Bidder whose Tender is accepted shall not be entitled to make any claim for increase in the rates quoted and accepted excepting in pursuance of any specific provision in the Contract for such and then only in terms of that specific provision, or to make any representation on the ground that he was supplied with any information or given any promise or guarantee of any sort, by the Director RGCA, his agents and servants, or their representatives or any other persons, unless such information, promise or guarantee is furnished to the Bidder in advance of the date of receipt of Tenders and in writing under proper authority.
- (19) The rates quoted shall be firm and fixed and not be subject to any variations. No price variation clause is allowed due on any account.
- (20) The Director RGCA will not unless otherwise provided for herein, supply or procure for the Contractor, materials of any description, and the Contractor shall make his own arrangements therefore at his own cost.

- (21) The rates quoted in Tenders shall remain valid for a period of Ninety Days from the date of their opening. The rates of the successful bid shall remain valid and firm till completion of the whole contract. If any Bidder withdraws his Tender before the expiry of the said period or makes any modifications to his Tender which are not acceptable to the Director RGCA the Tender will be treated as having been rejected or abandoned and EMD will be forfeited.
- (22) The Director RGCA does not bind himself to accept the lowest tender and reserves to himself the right to reject any or all of the Tenders received without assigning any reasons therefore.
- (23) The Director RGCA reserves the right to award any part of the work to more than one Bidder or to award the entire work to one Bidder.
- (24) The Director RGCA further reserves the right to delete or reduce an item or section of the bill of quantities without assigning any reason whatsoever therefore and no claim will be entertained in this regard.
- (25) The Director RGCA reserves the right to accept or reject any bid and to cancel the bidding process and reject all bids, at any time prior to the award of contract, without thereby incurring any liability to the affected bidder(s).
- (26) Temporary barricading/fencing with AC sheet / Galvalume sheet up to a height of 15 feet is to be provided to bifurcate the animal area in order to protect the animals inside the Rearing shed as a part of Bio security measure. The contractor has to make his own arrangement for materials, conveyance and erection. After the completion of work, the same has to be dismantled and taken back by the contractor at his own cost.
- (27) Regarding the proposed Roof shed at the HDPE Lined open Reservoir, the column, pile foundation, truss and roofing should be designed by the reputed Engineering firm and vetted by any Authorized institutions before initiation of work. The entire works shall be carried out by the contractor at his own cost.
- (28) Since the animals are being maintained at the Rearing shed, utmost care should be taken by producing minimal sound as part of Bio security measure.
- (29) The contractor has to engage a technically qualified following Engineers at work site

- a. Engineer with qualification - B.E Civil Engineering
- b. Supervisor with qualification - Diploma in Civil Engineering
- c. Supervisor with qualification - Diploma in Electrical Engineering

3.3. Tender Fee:

(1) The bidder shall submit the tender fee, otherwise called as "Cost of bid document", as specified in the bid data along with the bid, in the form of NEFT/RTGS to the below bank account.

Name of the Account Holder	Current Account Number	IFSC Code	Bank Name	Branch	Tender Fee (in Rs.) incl. GST
Rajiv Gandhi Centre for Aquaculture	10948711219	SBIN0000869	State Bank of India	Mayiladuthurai	Rs. 11,800/- (Rupees Eleven Thousand Eight Hundred Only)

- (2) Non-receipt of tender fee for the specified value and/or within the stipulated time, shall render the bid to be considered as non-responsive. RGCA shall not be responsible for any delay.
- (3) Tender fee once received shall not be refundable under any circumstances.
- (4) Exemptions on tender fee, as determined by the Government of India from time to time, shall be applicable, subject to production of appropriate valid documents, as part of the online application.

3.4. Earnest Money Deposit (EMD)

(1) All bidder shall submit a bid security, otherwise known as "Earnest Money Deposit", as specified in the bid data along with the bid, in the form of NEFT/RTGS to the below bank account.

Name of the Account Holder	Current Account Number	IFSC Code	Bank Name	Branch	EMD Amount (in Rs.)
Rajiv Gandhi Centre for Aquaculture	10948711219	SBIN0000869	State Bank of India	Mayiladuthurai	₹ 9,84,005/- (2% of Est. Val) (Rupees Nine Lakhs Eighty Four Thousand and Five only)

- (2) Non-receipt of EMD for the specified value and/or within the stipulated time, shall render the bid to be considered as non-responsive. RGCA shall not be responsible for any delay.
- (3) Exemptions on EMD, as determined by the Government of India from time to time, shall be applicable. Bidder claiming exemption shall submit the duly filled declaration in lieu of bid security (as per format provided in Form-4) along with necessary valid supporting documents. Failing which, the bid will be considered as non-responsive.
- (4) Bid security to the successful bidder will be refunded without interest, upon receipt of Performance Security or it can be adjusted against performance security, as the case may be. Bid securities of the unsuccessful bidders will be refunded without interest, latest by the 30th day after the award of the contract or immediately after the expiry of stipulated bid validity period, whichever is earlier.
- (5) A bidder's bid security will be forfeited, without any notice, if the bidder:
 - (i) withdraws or amends its/ his tender/bid;
 - (ii) impairs or derogates from the tender in any respect within the period of validity of the tender/bid;
 - (iii) if the bidder does not accept the correction of his bid price during evaluation; and
 - (iv) if the successful bidder fails to sign the contract or furnish the required performance security within the specified period.
- (6) In case of forfeiture of the EMD, the bidder shall become ineligible to participate in the re-tendering process, if any.

3.5. Performance Guarantee/ Performance Security:

- (1) Successful bidder who is awarded the contract shall submit a performance guarantee, otherwise known as "Performance Security", equivalent to the value as specified in the bid data, in the form of an account payee demand draft or a bank guarantee in favour of 'The Director RGCA from a scheduled commercial bank in India or online payment through RTGS or NEFT, within a period of 15 days from the date of award of contract.
- (2) The performance guarantee submitted should remain valid for a period of 60 days beyond the date of completion of all contractual obligations of the

contractor, including the Defect Liability Period (DLP).

- (3) The date on which the Contract Agreement is signed shall be construed as the commencement date of the work.
- (4) In case, time for completion of the works gets extended, the contractor shall get the validity of the performance guarantee extended, at his cost, to cover such extended time for completion of the work, including the DLP.
- (5) Once the contractor completes all his obligations under the contract, the performance guarantee will be refunded without interest, to the contractor after DLP.

The performance guarantee will be forfeited and credited to Director RGCA's account in the event of breach of contract by the contractor.

3.6. Security Deposit:

- (1) The Security deposit (otherwise specified as "Retention Money") shall be collected by deduction from each running bills and final bills at the rate or value as specified in the bid data.
- (2) 50% of Security deposit shall be refunded after issuing the Work Completion Certificate.
- (3) 50% of Security deposit shall be refunded after successful completion of the Defect Liability Period (DLP).

3.7. Payment:

- (1) Provisional sum:
 - (i) "Provisional sum" means a sum, if any, included in the contract and so designated in the schedule of prices, bill of quantities for the execution of work or the supply of goods materials, or services, or for contingencies, which sum may be used, in whole or in part, or not at all, at the direction of the Director RGCA. The contract price shall include only such amounts in respect of the work, supply or services to which such provisional sums relate as the Director RGCA shall approve or determine in accordance with this clause.
 - (ii) In respect of every provisional sum, the Director RGCA shall have power to order:

- (a) Work to be executed, including goods, materials or services to be supplied by the contractor. The contract prices shall include the value of such work executed or such goods, materials or services supplied determined in accordance with clause "Rates for works not in schedule of Quantities or Schedule of Rates and Claims".
- (b) Work to be executed or goods, materials or services to be supplied by a nominated sub-contractor as hereinafter defined. The sum to be paid to the contractor therefore shall be determined and paid in accordance with clause "Payments to nominated Sub -Contractors".
- (c) Goods and materials to be purchased by the contractor. The sum to be paid to the contractor therefore shall be determined and paid in accordance with clause "Production of Vouchers, etc."

(iii) The contractor shall, when required by the Director RGCA produce all quotations, invoices, vouchers and accounts or receipts in connection with expenditure in respect of provisional sums.

(2) Claims:

- (i) The contractor shall send to the engineer in-charge once in every milestone or month, as specified in the payment schedule, an account giving particulars as full and detailed as possible, of all claims for any additional payment to which the contractor may consider himself entitled and of all extra or additional work order by the Director RGCA which he has executed during the preceding month. No final or interim claim for payment for any such work or expense will be considered which has not been included in such particulars. Provided always that the Director RGCA shall be entitled to authorize payment to be made for any such work or expense, notwithstanding the contractor's failure to comply with this condition. The contractor shall, at the earliest practicable opportunity, notify the Director in writing that he intends to make a claim for such work.

(ii) Final claims:

Not later than thirty calendar days after the issue of the completion certificate, the contractor shall submit to the Director RGCA

settlement of final account with all supporting documents showing in detail the reconciliation of all materials issued to him if any and the value of the work done in accordance with the contract together with all further sums which the contractor considers to be due to him under the contract. After receipt of the final account and of all information reasonably required for its verification, and on the Engineer in-charge's certificate of completion in respect of the works, an adjustment shall be made and the balance of account based on the Engineer in-charge's certified measurements of the total quantity of work executed by the contractor up to the date of completion and on the accepted schedule of rates and for extra works on rates determined under clause "Rates for works not in schedule of Quantities or Schedule of Rates" of these conditions shall be paid to the contractor subject always to the contractor having delivered to the Director RGCA either a full account in detail of all claims he may have on the Director RGCA in respect of the works or having delivered a "No claim" certificate and the Director RGCA having after the receipt of done under the provisions of the contract have been completed, that they have been inspected by him since their completion and found to be in good and substantial order, injured in consequence of the work, have been properly replaced and made good and all expenses and demands incurred by or made upon the Director RGCA for or in respect of damage or loss by, from or to consequence of works, have been satisfied agreeably and in conformity with the contract.

(3) Director RGCA's lien on all moneys due:

(i) The Director RGCA shall have a lien on and over all or any, moneys that may become due and payable to the contractor under these presents, and/or also on and over the deposit or security amount or amounts made under the contract and which may become repayable to the contractor under the conditions in that behalf herein contained for or in respect of any debt or sum that may become due or payable to the Director RGCA by the contractor, either alone or jointly with another or others and either under this or under any other contract or transaction of any nature whatsoever, between the Director RGCA and the contractor.

- (ii) The Director RGCA reserves the right to carry out a post-payment audit and/or technical examinations of the works and the final bill, including all supporting vouchers, abstracts, etc., and to force recovery if as a result of such examination any over payment is discovered in respect of any work done by the contractor or alleged to have been done by him under the contract and such recovery will be made by the Director RGCA from the contractor by and/or all of the methods prescribed in these presents, or on the other hand, if any under payment is discovered the amount shall be duly paid to the contractor by the Director RGCA.
- (iii) Further the Director RGCA reserves the right to make such recoveries and adjustments notwithstanding the fact that the amount of the final bill may be included by one of the parties as an item of dispute before any arbitrator appointed under the arbitration clause of the contract and notwithstanding the fact that the amount of the final bill figures in the arbitration award.
- (iv) And further, unless the contractor pays and clears the claim of the Director RGCA immediately on demand, the Director RGCA shall at all times be entitled to deduct the said debit or sum due by the contractor from the moneys, securities or deposits which may have become payable to the contractor under these presents or under any other contract or transaction between the contractor and the Director RGCA.

(4) No interest shall be payable on the amount of retention money or the earnest money or any other dues of the contractor, nor shall any interest be payable in respect of the advances made by the Director RGCA to the contractor, unless otherwise provided.

(5) **Currency and terms of payment:**

- (i) All payments to the contractor shall be in Indian Rupees, unless otherwise specified in the Special Conditions of Contract.
- (ii) All payments to the contractor shall be subject to income tax as per relevant provisions for the time being. As required hereby TDS,GST , Security deposit, Construction labour welfare cess, cost of stores issued by Director RGCA, any other applicable statuary deduction as per the direction of the Govt. of India from time to time and any other

amounts due for recovery from the contractor.

- (iii) All payments to the contractor shall be subject to all accounting and auditing, provisions, procedures, rules, regulations, decrease, laws, etc., legislated, enacted or in force in India and as applicable to the State in which the work is carried out during the period of the contract.

(6) Periodic payment:

- (i) Payments to the contractors for works done and measured in terms of the provisions of respective clause shall normally be made based on milestone wise work completion as detailed in the Payment Schedule as part of the instructions to bidder.
- (ii) The valuation of the Director RGCA for the purpose of making periodic payments to the contractor through the account bill shall be considered as estimated only and the engineer reserves the authority to make amendments or modifications therein through any subsequent bill/bills.
- (iii) Running bills as executed up to date will be submitted by the contractor in quadruplicate along with the measurements. The same shall be verified and certified for payment within two weeks of submission of bills completed in all respects. Payment shall be made after deducting towards Income Tax, TDS, Security Deposit, Construction Labour Welfare Cess, cost of stores issued by the Director RGCA, if any and any other amounts due for recovery from the contractor.

(7) Payments on interim certificates to be regarded as advance:

The contractor shall on submitting the bill be entitled to receive a monthly/milestone as the case may be payment proportionate to the part thereof then approved and passed by the Director RGCA whose certificate of such approval and passing of the sums so payable shall be final and conclusive against the contractor. But all such intermediate payments shall be regarded as payments by way of advance against the final payment only and not as payment for works actually done and completed and shall not preclude the requiring of

bad, unsound and imperfect or unskilled work to be removed and taken away and reconstructed, or re-erected or be considered as an admission of the due performance of the contract or any part thereof in any respect of the accruing of any claim, nor shall it conclude, determine or affect in any way the powers of the Director RGCA under those conditions or any of them as to be the final settlement and adjustment of the accounts or otherwise or in any other way vary or affect the contract. The final bill shall be submitted by the contractor with full material reconciliation statement and other relevant documents within one month of the date fixed for completion of the work, otherwise the engineer's certificate of the measurement and of the total amount payable for the work accordingly shall be final and binding on all parties.

(8) Payments to nominated sub-contractors:

For all works executed or goods, materials or services supplied by any nominated sub-contractor, the contractor shall pay directly as per contract signed between him and the sub-contractor. However in case of any compliant received from the sub-contractor, during the pendency of the contract, about non-payment by the contractor which may affect the works, the Director RGCA will be fully empowered to intervene and direct the contractor to settle the disputes with the sub-contractor within ten days, failing which the Director RGCA shall make his own investigation and make such payments to the sub-contractor as he deems fit and recover the same amounts from the contractor's bills.

(9) Payment if contract is terminated:

If the contract shall be terminated, the contractor shall be paid by the Director RGCA, in so far as such amounts or items which shall not have already been covered by payments on account made to the contractor, for all work executed prior to the date of termination at the rates and prices provided in the contract and in additions.

- (i) The amounts payable in respect of any preliminary items, so far as the work comprised therein has been carried out or performed and a proper preparation as certified by the Director RGCA of any such items, the work comprised in which has been partially carried out or performed.
- (ii) The cost of materials or goods reasonably ordered for the works which

shall have been delivered to the contractor or of which the contractor is legally liable to accept delivery, such materials or goods becoming the property of the RGCA upon such payments being made by the Director RGCA.

- (iii) A sum to be certified by the Director RGCA, being the amount of any expenditure reasonably incurred by the contractor in the expectation of completing the whole of the works in so far as such expenditure shall not have been covered by the payments in this sub-clause before mentioned.
- (iv) Any additional sum payable under the provisions against any payments due from the Director RGCA under this sub-clause, the Director RGCA shall be entitled to be credited with any outstanding balances due from the contractor for advances in respect of constructional plant and materials and any other sums which at the date of termination were recoverable by the Director RGCA from the contractor under the terms of the contract.

(10) Payment in the event of Force Majeure:

If there arises a circumstance specified under "Force Majeure" which is beyond the control of both parties, after the contract is made so that either party is prevented from fulfilling his contractual obligations, or under the law governing the contract, the parties are released from further performance, then the sum payable by the Director RGCA to the contractor in respect of the work executed shall be the same as that which would have been payable under sub clause (1) above thereof, if the contract has been terminated under the relevant provisions thereof.

(11) If the works or any materials on the site shall sustain destruction or damage by reason or any of the said Force Majeure the contractor shall be entitled to payment for:

- (i) Any permanent work and for any materials so destroyed or damaged and so far as may be required by the Director RGCA, or as may be necessary for the completion of works, on the basis of cost plus such profit as the Director RGCA may certify to be reasonable.
- (ii) Replacing or making good any such destruction or damage to the works.

(iii) Replacing or making good such materials of the contractor used or intended to be used being at site of the works.

(12) Payment while default of contractor:

(i) Valuation at date of forfeiture:

The Director RGCA shall, as soon as may be practicable after any such entry and expulsion by the Director RGCA, fix and determine, or by experts or fix and determine experts, or by or after reference to the parties, of after such investigation or enquiries as he may think fit to make or institute and shall certify what amount, if any, bad at the time of such entry empulsion been reasonably earned by or have been reasonably earned by or would have reasonably earned by or would reasonably accrue to the contractor in respect of work then actually done by him under the contract and the value of any of the said unused or partially used materials, any constructional plant and any temporary works.

(ii) Payment after forfeitures:

If the Director RGCA shall enter and expel the contractor under this clause, he shall not be liable to pay to the contractor any money on account of the contract until the expiration of the period of maintenance and thereafter until the costs of execution and maintenance, damages for delay in completion, if any, and all other expenses incurred by the Director RGCA have been ascertained and the amount thereof certified by the Director RGCA. The contractor shall then be entitled to receive only such sum or sums, if any, as the Director RGCA may certify would have been payable to him upon due completion by him after deducting the said amount. If such amount shall exceed the sum which would have been payable to the contractor on due completion by him then the contractor shall, upon demand, pay to the Director RGCA the amount of such excess within thirty days and it shall be deemed a debt due by the contractor to the Director RGCA and shall be recoverable accordingly.

(13) The Director RGCA shall be entitled to determine and terminate the contract at any time should, in his opinion, the cessation of works become unnecessary for any cause whatsoever, in which case the value of approved materials at site and of work done to date by the contractor will be paid for in full at the rates specified in the contract. Notice in writing from the Director RGCA of such determination and the reason therefore shall be conclusive evidence thereof. Should the contract be determined under this clause and

the contractor claims payment for expenditure incurred by him in the expectation of completing the whole of the works, the Director RGCA shall admit and consider such claims as are deemed reasonable and are supported by vouchers to the satisfaction of the Director RGCA. The contractor shall have no claim to any payment of compensation or otherwise, however on account of any profit or advantage which he might have derived from the execution of the work in full but which he did not derive in consequence of the determination of the contract. The Director RGCA's decision on the necessity and propriety of such expenditure shall be final and conclusive.

3.8. Bonus and Penalty:

- (1) The contractor shall not be entitled to payment of any bonus or incentive for early completion of the works.
- (2) Compensation for delay:
 - (i) If the contractor fails to maintain the required progress to complete the work and clear the site on or before the contract period or justified extended date of completion, then the contractor shall pay to the Director RGCA a sum at the rate of 1% (one percent) per month, computed on a pro-rata basis for each day of delay on the quantum of damage suffered due to stated delay on the part of contractor, irrespective of whether RGCA has incurred any loss or not.
 - (ii) Provided always that the total amount of compensation for delay to be paid under this condition shall not exceed 10% (ten percent) of the accepted tendered value of work or of the accepted tendered value of the sectional part of work.
- (3) Liquidated damages for delay:
 - (i) If the contractor shall fail to achieve completion of the works within the time prescribed by clause "Time of completion and Progression of work" then the contractor shall pay to the Director RGCA the sum stated in the contract as liquidated damages for such default and not as a penalty for every day or part of a day which shall elapse between the time prescribed in relevant clause thereof and the date of certified completion of the works, irrespective of whether RGCA has incurred any loss or not. The Director RGCA may, without prejudice to

any other method of recovery, deduct the amount of such damages from any money in his hands, due or which may become due to the contractor. The amount or deduction of such damages shall not relieve the contractor from his obligation to complete the works, or from any other of his obligations and liabilities under the contract.

- (ii) If, before the completion of the whole of the works any part or section of the works has been certified by the Director RGCA as completed, pursuant to clause "Certification of completion of works", and occupied or used by the Director RGCA, the liquidated damages for delay shall for any period of delay after such certificate and in the absence of alternative provisions in the contract be reduced in the proportion which the value of the part or section so certified bears to the value of the whole of the works and Director RGCA's decision shall be final and binding as to the amount of such reduction, if any.
- (iii) The liquidated damages for delay of each week or part thereof, shall be at the rate of one percent, on the total value of the contract price excluding the value of such part or section of the works as may have been covered by certificate of completion. Provided however that the total amount of liquidated damages shall not exceed ten percent (10%) of the total contract price for the whole works.
- (iv) The liquidated damages referred to in sub-clause (1) to (3) above, shall be considered as a reasonable compensation to be applied to the use of the Director RGCA without reference to the actual loss or damage sustained and whether or not any damage shall have been sustained.

3.9. Notices:

- (1) Contractors Local Office and Service of Notice to Contractor:
 - (i) The Contractor shall have a local office at or near site of work. Full address thereof shall be intimated by the Contractor or his authorized agent to the Director RGCA as well as the engineer in- charge.
 - (ii) All certificate, notices or written orders to be given by the Director RGCA or by the engineer in-charge to the Contractor under the terms of the Contract, shall be deemed to have been served by sending by

registered post/ speed post to the last known place to abode or business of the Contractor on the date when in the ordinary course of post these would have been delivered to him or delivering the same to the Contractor's local office.

(2) Service of Notice to the Director RGCA or Engineer in-charge:

- (i) All notices to be given to the Director RGCA or to the engineer in-charge under the terms of the Contract, shall be served by sending by post or delivering the same to the site address and or the address of the Tender inviting authority as stated in the bid data.

(3) Change in Address:

- (i) The Director RGCA, the Engineer in-charge or the Contractor may change his nominated address to another address by prior written notice to the other two.

3.10. Settlement of Disputes:

(1) **Arbitration**

- (i) All disputes or differences of any kind whatsoever arising out of or in connection with the contract, whether during the progress of work/ service or after its completion and whether before or after the determination of the contract, shall be referred by the contractor to the Director RGCA and the Director RGCA shall within a reasonable time after their presentation make and notify decisions thereon in writing. The decisions directions, classifications, measurements, drawings and certificates with respect to any matter, decision of which is specially provided for by these conditions given and made by the Director RGCA, are matters which are referred to hereinafter as excepted matters, and shall be final and binding on the contractor, and shall not be set aside or attempted to be set aside on account of any informality, omission, delay or error in proceeding in or about the same or on any other ground or for any other reason and shall not be appealable.
- (ii) If the contractor be dissatisfied with the decision of the Director RGCA on any matter or question, dispute or difference on any

account or as to the withholding by the Director RGCA of any certificate to which the contractor may claim to be entitled, or if the Director RGCA fails to make a decision within a reasonable time then and in any such case, but except in any of the excepted matters referred to above, the contractor may within a reasonable time but not exceeding 30 days of the receipt of communication of such decision take steps to refer the matter in question, dispute or difference to arbitration as herein under provided.

- (iii) The demand for arbitration by the contractor shall specify the matters which are in question, dispute or difference, only such dispute or difference(s) in respect of which the demand has been made shall be referred to arbitration and other matters shall not be included in the reference.
- (iv) If the contractor does not prefer his specific and final claims in writing within a period of sixty (60) days of receiving the intimation from Director RGCA that the final bill is ready for payment, he will be deemed to have waived his claim(s) and the Director RGCA shall be discharged and released of all liabilities under the contract in respect of those claims.
- (v) Matters in question, dispute or difference between the parties (whatever relating to the contractor's claim against the Director RGCA or vice versa) to be arbitrated upon shall be referred for decision to:
 - (a) In respect of sub-clauses with private contractors:

The sole arbitration of the by an arbitrator approved by the from the list of arbitrators defined by Engineers India and if the Director RGCA is unable or unwilling to act as such then the matter shall be referred to sole arbitration of such other person appointed by the Director RGCA willing to act as such arbitrator. There will be no objection, if the arbitrator, so appointed is unable to act for any reasons, Director RGCA in the event of such inability shall appoint another person to act as arbitrator in accordance with the terms of the sub-contract. Such other person shall be entitled to proceed with the reference from the state at which it was left by his predecessor. It is also a term of this contract that no person other than a person appointed by

Director RGCA as aforesaid should act as arbitrator.

Subject as aforesaid the provision of the India Arbitration and Conciliation Act, 1996 or any statutory modification or re-enactment thereof and the rules made there under and for the time being in force shall apply to the arbitration proceeding under this clause.

(b) In respect of sub-clauses with contractors with Public Sector Undertaking and Government Department:

The arbitration or one of the arbitrators in the Department of Public Enterprises to be nominated by the Secretary to the Government of India in charge of the Bureau of Public Enterprises. The India Arbitration and Conciliation Act, 1996 shall not be applicable to the arbitration under this clause. The award of the arbitrator shall be binding upon the parties to the dispute, provided, however, any partly aggrieved by such award not have a further reference for setting aside or revision of the award to the Law Secretary, Department of Legal Affairs, Ministry of Law & Justice, Government of India, Upon such reference the dispute shall be decided by the Law Secretary or the Special Secretary/ Additional Secretary when so authorized by the Law Secretary, whose decision shall bind the parties finally and exclusively.

(c) The parties in dispute will share equally the cost of arbitration as intimated by the arbitrator.

(d) It is a term of the sub-contract that the party seeking arbitration shall specify the dispute to be referred to arbitration under this clause together with the amount or amounts claimed in respect of each such dispute(s). The arbitrator may from time to time with the consent of the parties enlarge the time for making and publishing the award. The work under the contract shall nevertheless continue during the arbitration proceedings. The arbitrator shall be deemed to have entered on the reference on the date he issues notice to both the parties fixing the date of the first hearing. The arbitrator shall give a separate reasoned

award in respect of each reference referred to.

- (e) The award of the arbitrator shall be final conclusive and binding on all parties to this contract.

(vi) Progress of work not to be interrupted:

The contractor must at all-time fulfill his obligations under the contract and shall not slow down or stop the progress of works during the period any dispute is under settlement either through reference to the Director RGCA or through arbitration, pursuant to the last preceding sub clause. Even if the works to be carried out during such period involves matters under dispute. Failure of the contractor in this respect shall constitute a default on his part and render him liable to action under the provisions of the clause "Remedies and Power".

2. Court Jurisdiction

The Court within the jurisdiction of place where executing the works (i.e), Sirkali, Tamil Nadu alone shall have jurisdiction to deal with any dispute arising out of this contract.

Annexure 1- List of Approved Makes

S.No	Description	Work specification as per IS 1786-1985 , IS 456 & IS800	Approved Make as per CPWD
1	Cement	For Concrete works -53 Grade OPC with ISI mark	RAMCO, Chettinad, Ultratech, Birla ,AC C
		For Plastering works -43 Grade OPC with ISI mark	
2	Steel Reinforcement	TMT - FE-500 with ISI mark	TATA , Vizag , Tulsian , Jindal , Zail
3	Structural Steel sections	as mentioned in the BOQ with ISI mark	TATA , Vizag , Tulsian , Jindal , Zail
4	Aluminium works	as mentioned in the BOQ with ISI mark	Jindal , Indal , Hindalco
5	Food Grade Epoxy Paint	as mentioned in the BOQ (Color - Black , Blue & Grey)	Asian , Shalimar, Germen polymers
6	Enamel Paint & Exterior Paint	as mentioned in the BOQ	Asian ,Shalimar, Berger ,Nipon
7	Emulsion	as mentioned in the BOQ	Asian ,Shalimar, Berger ,Nipon
8	Water proofing materials	as mentioned in the BOQ	Fosroc, ROFF / Dr. Fixit (Pidilite Industries), CICO, Sika, BASF, Ardex Endura (Bal Endura)
9	UPVC Doors & Windows	as mentioned in the BOQ	Fenesta, QUTE, KOMERLING, RHEAU, Aluplast, NCL VEKA Limited
10	PVC Pipes & Fittings	as mentioned in the BOQ	Finolex, Astral, Sudhakar
11	UPVC Pipes & Fittings	as mentioned in the BOQ	PRINCE/ SUPREME/ ASHIRWAD / EQ
12	Roof Sheets(Corrugated)	as mentioned in the BOQ with ISI Mark	Everest / TATA / Hitech/Charminar
13	Transparent roof sheets (Corrugated)	Polycarbonate sheets - minimum 2 mm thickness with ISI Mark	GE / Macrolux / Polytechno / Danpalon/ Everest / TATA/ HitEch
14	Locks	as mentioned in the BOQ	Godrej, Dorset, Yale, EPPW, Dorma, Kitch.
15	Float Glass / Mirror	as mentioned in the BOQ	Modi guard, Saint gobain, Ashahi, HNG
16	Glazed tiles	as mentioned in the BOQ	Somany, Asian Kajaria Nitco
17	Ceramic tiles	as mentioned in the BOQ	Somany, Asian Kajaria Nitco
18	Vitrified Tiles	as mentioned in the BOQ	Somany, Asian Kajaria Nitco
19	Joint Filler / silicon paint	as mentioned in the BOQ	Wacker, Dowcorning, Sika, Chokshi, Saudal.
20	Paint, primer	as mentioned in the BOQ	Asian, Berger, ICI,
21	Putty	as mentioned in the BOQ	Birla , Berger, Asian

22	Aluminum sections	as mentioned in the BOQ	Jindal, Hindalco , Gujarat extrusion, Banco
23	Aluminum finish	as mentioned in the BOQ	Color anodized / pure polyester powder coating
24	Window locks cum handle	as mentioned in the BOQ	Alualpha, Giessee or equivalent.
25	Door Window & Furniture Hardware	as mentioned in the BOQ	Enox , dorma , godrej , Kitch, EPPW, Dorma, Palladium, Ozon, Magnum, Yale.
26	Aluminum finish	as mentioned in the BOQ	Color anodized / pure polyester powder coating
27	Window locks cum handle	as mentioned in the BOQ	Alualpha, Giessee or equivalent.
28	Putty	as mentioned in the BOQ	Birla , Berger, Asian
29	SWR PVC PIPE & FITTINGS 6 KG CM ² ; FITTINGS: 6 KG CM ² ECO. DRAIN PIPE & FITTINGS	as mentioned in the BOQ	FINOLEX /SUPREME/PRINCE/ SUPREME/ ASTRAL
30	SANITARY FIXTURES	as mentioned in the BOQ	JAQUAR / HINDWARE / PARRYWARE / CERA / KOHLAR
31	MCB/ELCB/RCCB/E LMCB	as mentioned in the BOQ	LEGRAND DX3, ABB,HAGER,SCHNEIDER,C&S, L&T,SEIMENS
32	ELECTRICAL CABLES	as mentioned in the BOQ	AVOCAB,FINOLEX,PRIMECAB,PO LYCAB,DIAMOND POWER,RRCABLE,HAVELLS,RR
33	PVC insulated FRLS Copper wires	as mentioned in the BOQ	Finolex/Havells/Polycab/L&T/KEI/Anchor
34	XLPE Insulated PVC Sheathed Al,Cu Cables	as mentioned in the BOQ	Polycab/Finolex/Polycab/KEI/Anchor
35	MS Conduit & Accessories of MS Conduit	as mentioned in the BOQ	BEC/AKG/NIC/Steel kraft/Gupta/VIMCO RMCON/Javeri
36	MCB	as mentioned in the BOQ	Legrand/Schneider/Siemens/ABB/Havells/L&T/C&S
37	Change Over switch	as mentioned in the BOQ	L&T/Seimens/Legrand
38	DB/ELCB/RCBO	as mentioned in the BOQ	L&T/Seimens/Legrand/Havells/C&S
39	Modular Type Switches /GI Boxes/Sockets/Outlet Sockets	as mentioned in the BOQ	Legrand/Schneider/polycab/Havells/C &S/Myrius
40	Ammeter/Voltmeter/ MF Meter/Energy Meter	as mentioned in the BOQ	AE/MECO/L&T/HPL/C&S
41	Gland/Lugs	as mentioned in the BOQ	Commet/Dowells/Jaison
42	Lugs & Thimbles	as mentioned in the BOQ	Dowells/Multi/Capital/Jaisons/ Commet /Schneider

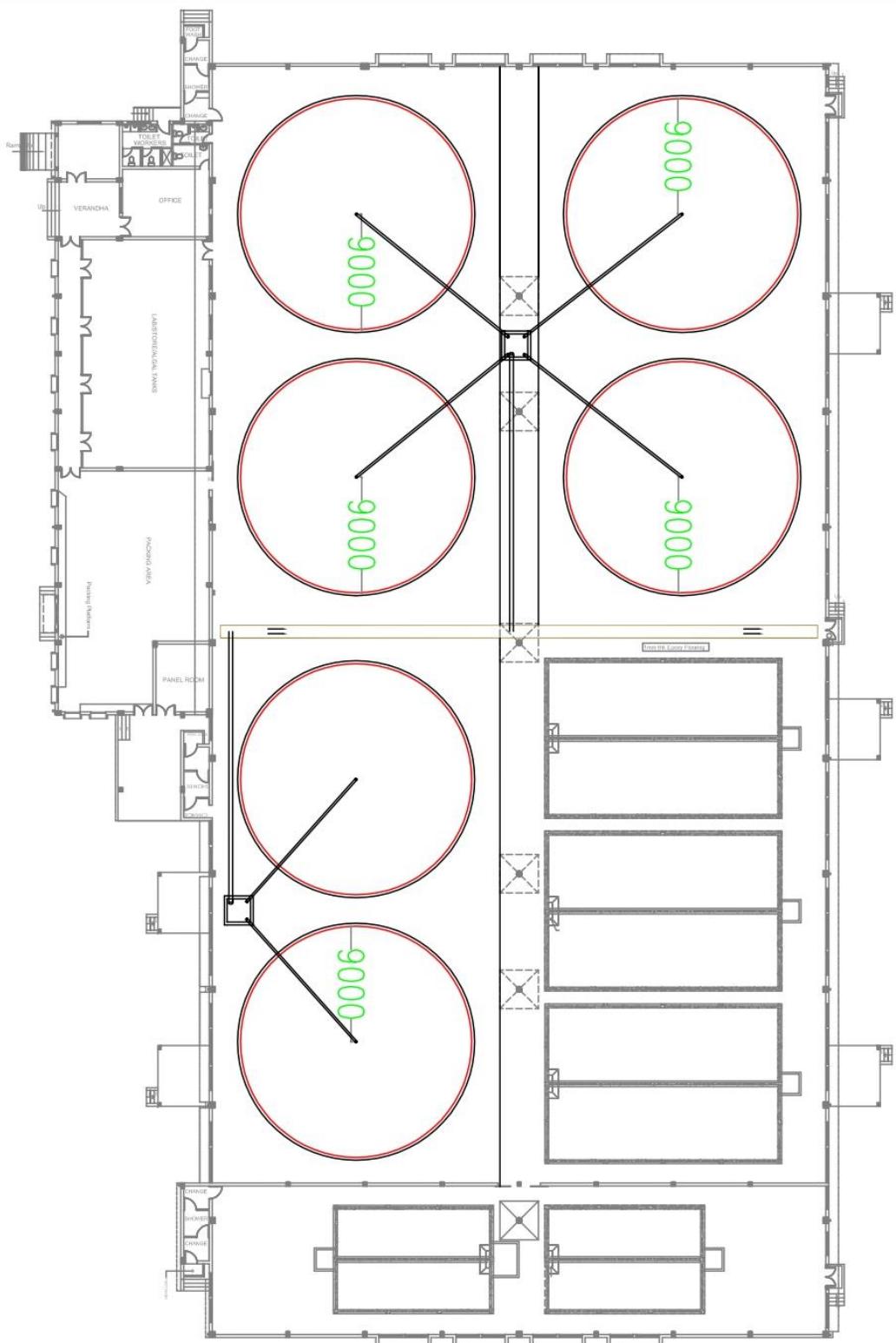
43	PVC Conduit	as mentioned in the BOQ	Avon Plast/GM/BEC/AKG/Precision
44	Celing Rose	as mentioned in the BOQ	Antex/Leader/Emperor/Anchor
45	Exhaust Fan	as mentioned in the BOQ	Havells/Crompton/Orient/Almonard/Bajaj
46	Fans	as mentioned in the BOQ	Orient/Crompton/Havells
47	LED Luminaries including Street Light Fitting (ISI Marked)	as mentioned in the BOQ	Philips/Wipro/Crompton Greaves/Bajaj/Osram
48	XLPE insulated Armoured UG Cable	as mentioned in the BOQ	CCI/Havells/KEI/Gloster/Finolex/NICCO/Universal/FortuneArt
49	Diesel Generator	as mentioned in the BOQ	Cummins/Kirloskar
50	Centrifugal Pumps	as mentioned in the BOQ	Johnson SPX Flow/Leakproof Engineering/TFT
51	Ozone Generators	as mentioned in the BOQ	Eltech Ozone Pvt Ltd or Equivelant
52	Solar power Plant	as mentioned in the BOQ	Jai Solar Energy Management or Equivelant
53	Servo Stablizer	as mentioned in the BOQ	Tech Power Electrix or Equivelant
54	Air Conditioners	as mentioned in the BOQ	Daikin/Bluestar/Carrier
55	Water Heater	as mentioned in the BOQ	V-Guard/Crompton/Havells
56	Deepfreezer	as mentioned in the BOQ	Blue star/Voltas
57	Ozone Mixing Cone	as mentioned in the BOQ	Emaux or Equivelant
58	Cartridge Filter	as mentioned in the BOQ	Pentair or equivelant
59	Sand Filter	as mentioned in the BOQ	Emaux or Equivelant
60	pump Starters	as mentioned in the BOQ	L&T or Equivelant

Annexure 2- Drawings

HDPE LINERTANKS

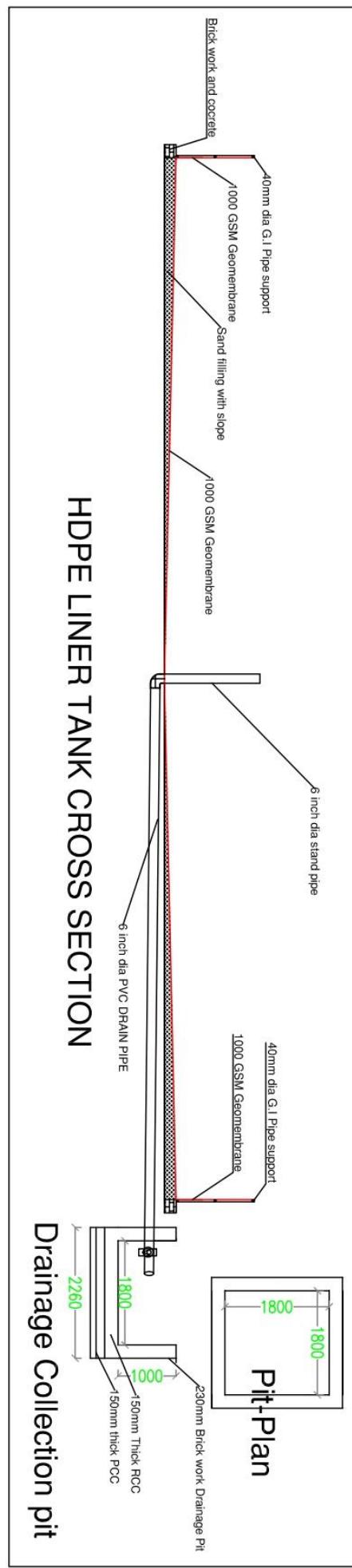


BROODSTOCK MULTIPLICATION FOR RGCA, KANYAKUMARI
HDPE-GEOMEMBRANE TANK

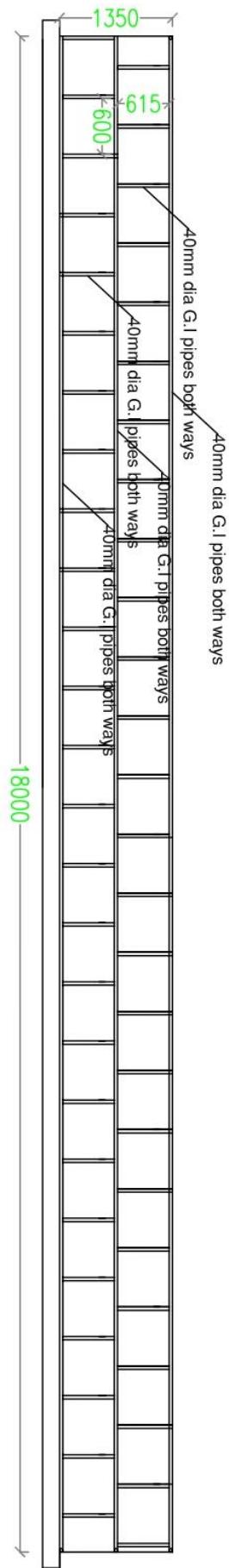


HDPE LINER TANK CROSS SECTION

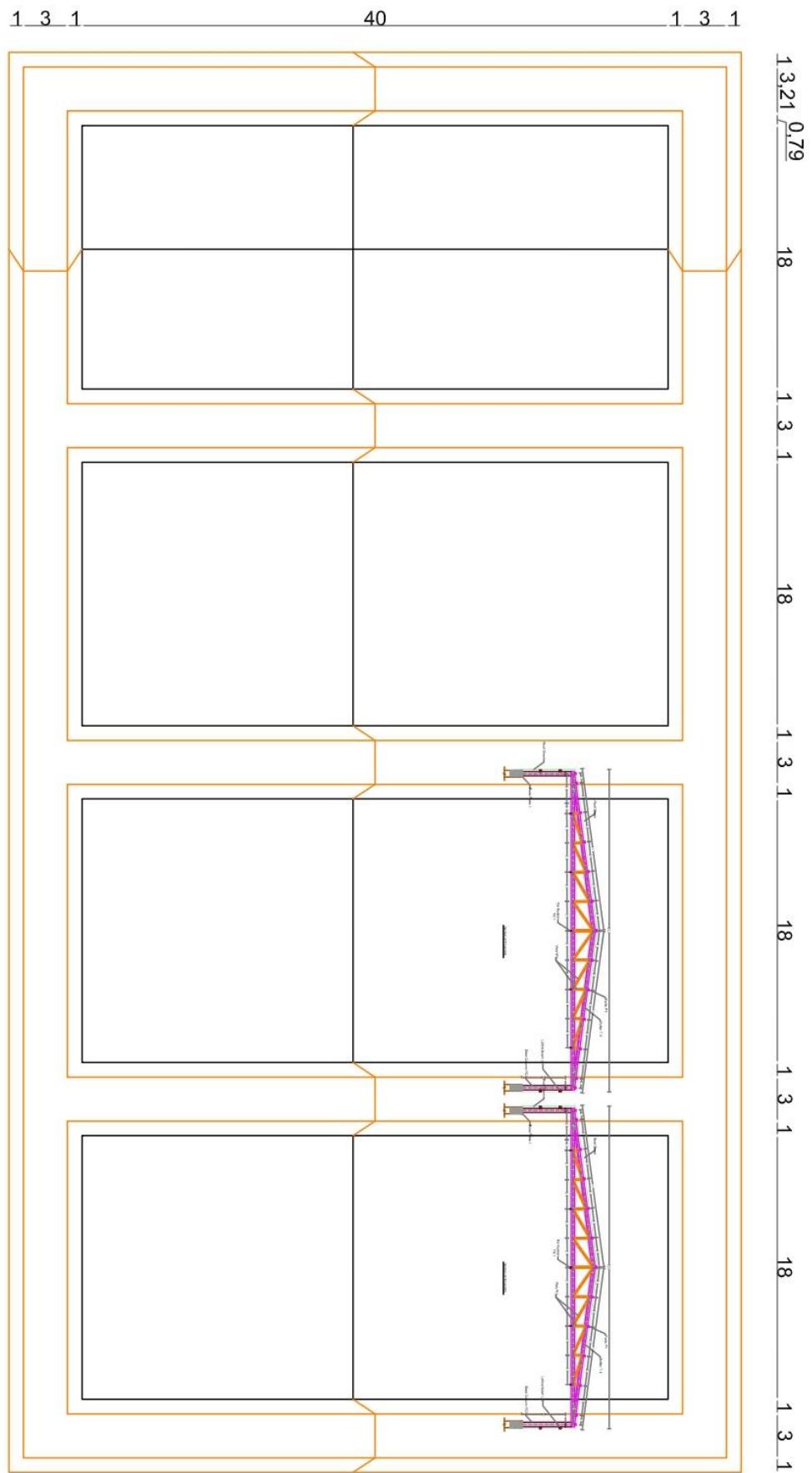
Drainage Collection pit



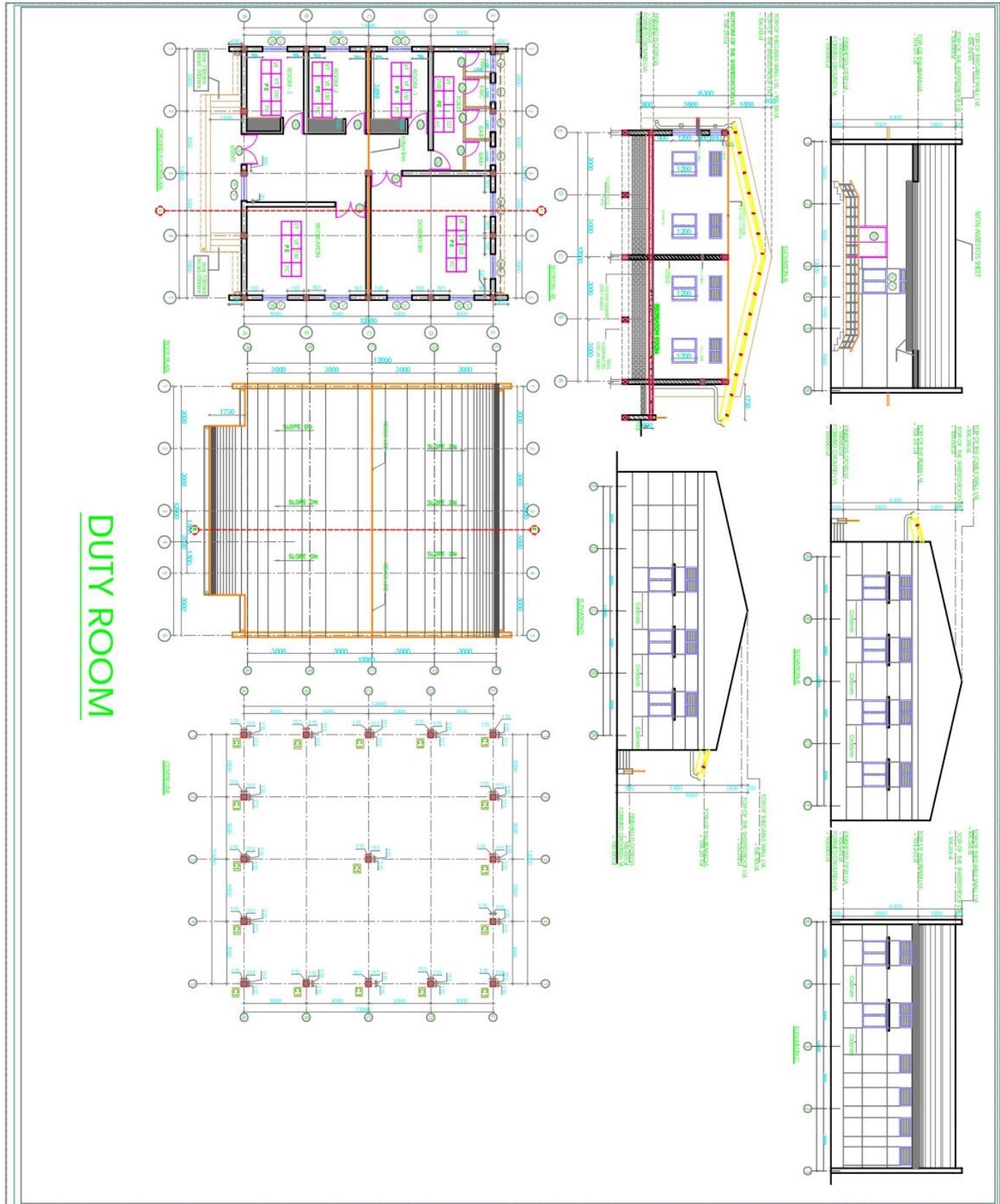
HDPE LINER TANK ELEVATION



HDPE LINED POND ROOFING WORKS

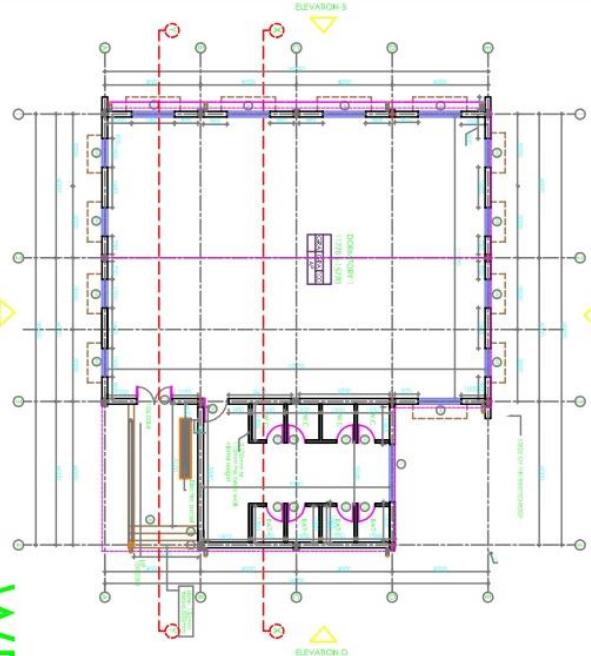


DUTY ROOM

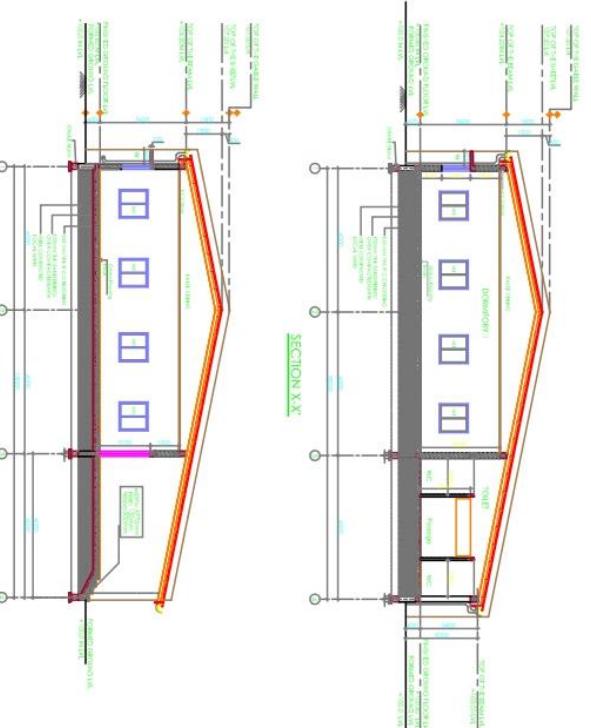
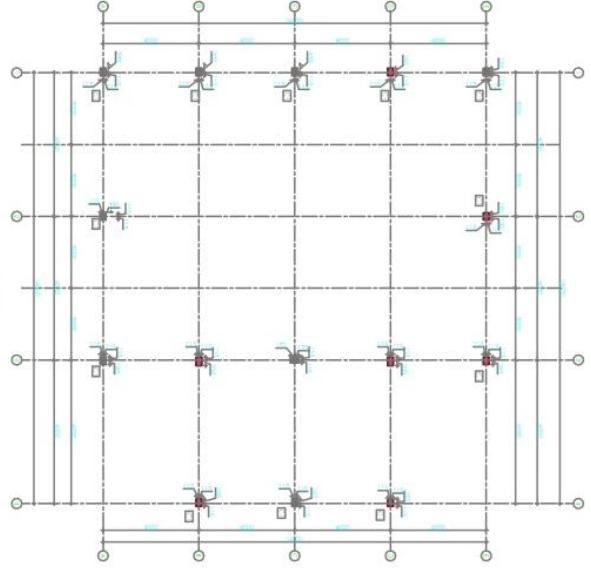
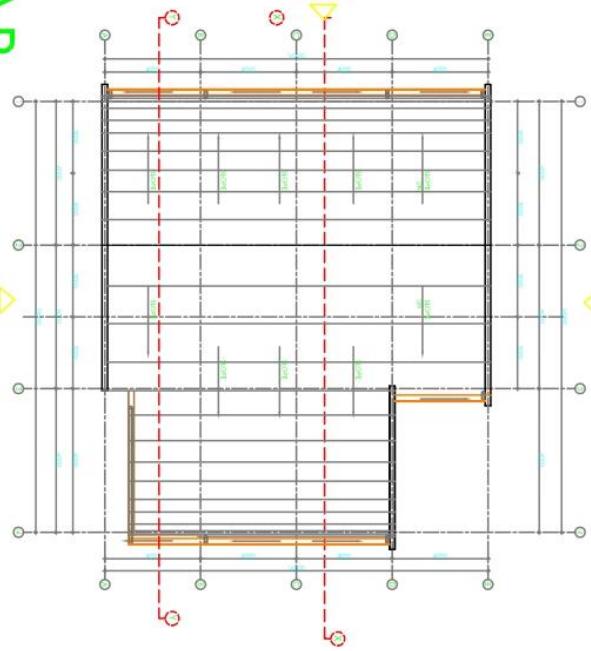


WET LAB

GROUND FLOOR PLAN



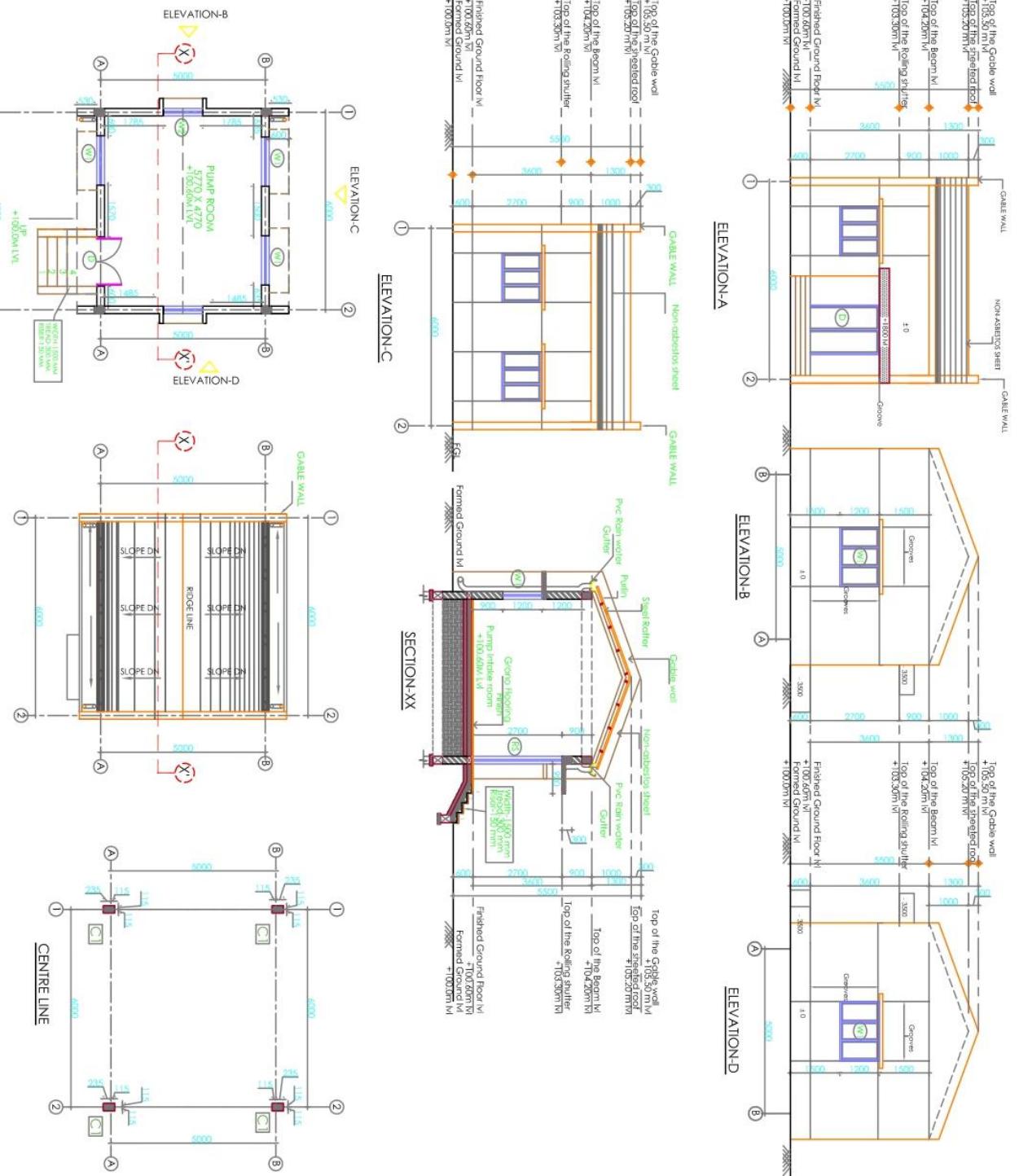
ROOF PLAN



INTAKE PUMP SHED

GROUND FLOOR PLAN

ROOF PLAN



(to be signed on a stamp paper with minimum value of Rs.100)

Annexure - 3

AGREEMENT FORMAT

THIS AGREEMENT made in.... location Sirkali the -th day of202...

BETWEEN

M/s. Rajiv Gandhi Centre for Aquaculture (RGCA), Marine Products Export Development Authority (MPEDA), Ministry of Commerce & Industry Government of India, having its Head Office at 3/197 Poompuhar Road, Sattanathapuram, Karimedu Village, Sirkali Taluk, Mayiladuthurai District - 609109, Tamil Nadu represented by the Director, (hereinafter called "Director RGCA" or "FIRST PARTY" which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns) of the ONE PART.

AND

M/s..... represented by Shri, Aged..., son of residing at (address) (Hereinafter called "Contractor" or "SECOND PARTY" which expression shall unless repugnant to the meaning or context hereof mean and includes its legal heirs, successors and assigns) of the OTHER PART.

WHEREAS the Director RGCA is desirous of doing a Construction Works, Establishment of Broodstock Multiplication Centre for Tiger Shrimp, herein after referred collectively as "works", at Thekkurichi Village, Rajakkamangalam, Kannykumari District, Tamil Nadu as per Schedule I to this Agreement and has caused Notice Inviting Tender, Terms and Conditions of Contract, bill of quantities and a specification describing the work to be done as prepared by RGCA.

And has accepted the offer of the second party on the basis of their bid in response thereto to execute the aforesaid work to the complete satisfaction of the first party.

AND WHEREAS the said drawings as per Schedule II inclusive of the bill of quantities and the specifications as per RGCA specifications/ M.E.S.S./ Local PWD Specifications/ Highway Manuals/ The Indian Standard Specifications have been signed by or on behalf of the parties hereto:

The work shown upon the said drawings and described in the said specification and included in the said bill of quantities for the sum of Rs..... (Rupees.....).

NOW IT IS HEREBY AGREED BY AND BETWEEN THE PARTIES AS FOLLOWS:

1. In consideration of the sum of Rs..... (Rupees.....). The sum of only to be paid at the times and in the manner set forth in the said conditions subject to changes on the basis of actual measurement by the first party or his authorized Engineer in charge, the Contractor will upon and subject to the said conditions execute and complete the works shown upon the said drawings and described in the said specification and bill of quantities.
2. The Director RGCA will pay to the Contractor the said sum of Rs..... (Rupees) or such other sum as shall become payable hereunder at the times and in the manner specified in the said conditions.
3. The notice inviting tender, said conditions, specifications and priced bill of quantities shall be read and construed as forming part of this Agreement, and the parties hereto will respectively abide by and submit themselves to the conditions and stipulations and perform the Agreement on their parts respectively in such conditions, specifications and priced bill of quantities contained.
4. Payments shall be made to the Contractor for works done and measured in terms of the provisions as per the payment schedule specified in para 1.6 of the tender document. All payments are subject to the deduction of Security Deposit/ Retention Money as specified in para 3.6 of the tender document.
5. Time is the essence of this contract. The time for the completion of the work is 12 (Twelve) Months from the day of placing the work order, as per the time schedule specified in para 1.5 of the tender document.
6. Penalties for delay shall be applicable in the form of compensation and/or liquidated damages, as specified in para 3.8(2) and 3.8 (3) of the terms and conditions of the tender document.
7. The following, along with their subsequent amendment/corrigendum (if any), shall form part of the contract
 - i) Notice Inviting Tender(NIT)
 - ii) Tender Document

- iii) Bill of Quantity & Drawing (submitted by Contractor)
- iv) Letter of Acceptance (LOA)
- v) Integrity Agreement
- vi) Work Order

In witness whereof the parties hereunto set their hand the day and year first above written.

Signed by the Director RGCA:

Signed by the Contractor:

.....

.....

In the Presence of Witnesses:

NAME:

OCCUPATION:

ADDRESS:

NAME:

OCCUPATION:

ADDRESS:

SCHEDULE I

Scope of Work:

(1) The scope of work under this contract, at project site, shall broadly include: Construction Works - Establishment of Broodstock Multiplication centre for Tiger Shrimp, herein after referred collectively as "works", at Thekkurichi Village, Rajakkamangalam, Kannykumari District, Tamil Nadu Major works, as part of the scope of the work, shall include but not be limited to the following.

(2) All work shall be performed in accordance with the terms, conditions and approved drawings and as per the instructions of the Director RGCA.

The scope of work under this contract, at project site, shall broadly include:

A) Civil Works

- (i) Intake Pump shed
- (ii) Finishing the floor of remaining area available inside the grow out shed
- (iii) 6 numbers of 18 meters diameter and 1.35 meters height Geo membrane tank for Grow out culture & construction of civil works, required for PVC drainage pipes and installation, cat walks materials and installation (rearing tanks as demonstrated by ICAR-CIBA for intensive shrimp production)
- (iv) Duty Room
- (v) Wet lab facility
- (vi) Approach road and parking area inside the facility
- (vii) PCR Lab civil works
- (x) Strengthening the Bio security of HDPE lined pond reservoir by covering Non asbestos roofing sheets supported with G.I/MS structures. (Providing and laying 6 mm thick corrugated cement sheet (Non Asbestos sheet) with necessary J, or L hooks, bolts and nuts 8 mm dia, G.I. plain and bitumen washers or with self-drilling fastener and EPDM washers on structural roof truss work of Buildings. Providing and laying 6 mm thick corrugated cement sheet (Non Asbestos sheet) with necessary J, or L hooks, bolts and nuts 8 mm dia, G.I. plain and bitumen washers or with self-drilling fastener and EPDM washers on structural roof truss work of Buildings.)
- (viii) Additional Fencing on the seaside to strengthen Biosecurity

B) Sanitary Plumbing Works

C) Aquaculture Plumbing Works

D) Electrical Works

E) Equipment's & machineries

Tender Inviting Authority: RAJIV GANDHI CENTRE FOR AQUACULTURE Name of Work: Establishment of Broodstock Multiplication Centre for Tiger Shrimp at Thekkurichi Village, Rajakkamangalam, Kanyakumari District, Tamil Nadu						
Contract No:						
PRICE SCHEDULE						
(This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevant columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only)						
Sl. No.	Item Description	Quantity	UNIT	Estimated Rate in Rs. P	TOTAL AMOUNT Without Taxes in Rs. P	TOTAL AMOUNT With Taxes in Rs. P
1	CIVIL WORKS---EARTH WORK EXCAVATION					
1.01	DSR 2023-2.6 Earth work in excavation by mechanical means Hydraulic excavator)/ manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead up to 50 m and lift up to 1.5 m, as directed by Engineer-Incharge					
1.02	All Kinds of soil	1700.00	CUM	204.13	347021.00	347021.00
2	FILLING AVAILABLE EXCAVATED EARTH					
2.01	DSR 2.25 Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	650.00	CUM	225.40	146510.00	146510.00
3	DRESSING AND FILLING					
3.01	DSR 2.28 Surface dressing of the ground including removing vegetation and in equalities not exceeding 15 cm deep and disposal of rubbish, lead up to 50 m and lift up to 1.5 m	5000.00	SQM	39.27	196350.00	196350.00
4	FILLING EARTH BROUGHT FROM OUTSIDE					
4.01	DSR 2.27 Supplying and filling in plinth with sand under floors, including watering, ramming, consolidating and dressing complete up to any lead	170.00	CUM	2442.31	415192.70	415192.70
5	CONCRETE					
5.01	DSR 4.18, 1:4:8 (1 Cement : 4 coarse sand (zone-III) derived from natural sources : 8 graded stone aggregate 40 mm nominal size derived from natural sources)	215.00	CUM	7833.80	1684267.00	1684267.00
5.02	DSR 5.1.2, Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level : 1:1.5:3 (1 cement : 1.5 coarse sand (zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources)	95.00	CUM	10402.61	988247.95	988247.95
5.03	Reinforced cement concrete work in beams, suspended floors, roofs having slope up to 15° landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases above plinth level up to floor five level, excluding the cost of centering, shuttering, finishing and reinforcement with 1:1.5:3 (1 cement : 1.5 coarse sand(zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources)	35.00	CUM	13231.33	463096.55	463096.55
6	PILE					
6.01	DSR-20.3.1 Boring with hydraulic piling rigs with power units, providing and installing cast in situ single under reamed piles of specified diameter and length below pile cap in M-25 cement concrete, to carry a safe working load not	400.00	RM	3525.44	1410176.00	1410176.00

	less than specified, excluding the cost of steel reinforcement but including the cost of boring with bentonite solution and the length of the pile to be embedded in pile cap etc. all complete. (Length of pile for payment shall be measured up to the bottom of pile cap)-300 MM DIA PIPES					
7	REINFORCEMENT					
7.01	DSR-5.22.6 Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete up to plinth level. Thermo-Mechanically Treated bars of grade Fe-500D or more.	15600.00	KG	124.30	1939080.00	1939080.00
7.02	DSR-5.22 A Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level. Thermo-Mechanically Treated bars of grade Fe-500D or more.	2930.00	KG	124.30	364199.00	364199.00
8	FORM WORK					
8.01	DSR 5.9.1 Centering and shuttering including strutting, propping etc. and removal of form for Foundations, footings, bases of columns, etc. for mass concrete	200.00	SQMT	450.97	90194.00	90194.00
8.02	DSR 5.9.5 Lintels, beams, plinth beams, girders, bressumers and cantilevers	300.00	SQMT	846.86	254058.00	254058.00
8.03	DSR 5.96 Columns, Pillars, Piers, Abutments, Posts and Struts	165.00	SQMT	1105.50	182407.50	182407.50
9	BRICK WORK					
9.01	DSR 6.30.1 Brick work with common burnt clay machine moulded perforated F.P.S. (non modular) bricks of class designation 12.5 conforming IS : 2222 in exposed brick work including making horizontal and vertical grooves 10mm wide 12 mm deep complete in cement mortar 1:6 (1 cement : 6 coarse sand).- From ground level up to plinth level	35.00	CUM	8475.85	296654.75	296654.75
9.02	DSR 6.30.2 Brick work with common burnt clay machine moulded perforated F.P.S. (non modular) bricks of class designation 12.5 conforming IS : 2222 in exposed brick work including making horizontal and vertical grooves 10mm wide 12 mm deep complete in cement mortar 1:6 (1 cement : 6 coarse sand).- Above plinth level up to floor V level	35.00	CUM	10745.60	376096.00	376096.00
9.03	DSR 6.12 Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundations and plinth in :	125.00	SQMT	1071.51	133938.75	133938.75
10	ROOFING					
10.0 1	DSR 10.2 Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	57350.00	KG	128.74	7383239.00	7383239.00
10.0 2	DSR 12.8 Providing reinforced by organic fibres and/or inorganic synthetic fibres cement 6 mm thick corrugated sheets (as per IS: 14871) roofing up to any pitch and fixing with polymer coated J, or L hooks, bolts and nuts 8 mm dia. G.I. plain and bitumen washers or with self drilling fastener and EPDM washers etc. complete (excluding the cost of purlins, rafters and trusses), including cutting sheets to size and shape wherever required	3660.00	SQMT	616.86	2257707.60	2257707.60
10.0 3	DSR 12.12.1 Providing and fixing ridges and hips in fibre cement reinforced by organic fibres and/or inorganic synthetic fibres roofing with suitable fixing accessories or self drilling fastener and EPDM washer etc. complete. Corrugated serrated adjustable ridges	200.00	RM	601.39	120278.00	120278.00
11	FLOORING					

11.0 1	DSR113.1 62 mm thick cement concrete flooring with concrete hardener topping, under layer 50 mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) and top layer 12mm thick cement hardener consisting of mix 1:2 (1 cement hardener mix : 2 graded stone aggregate, 6mm nominal size) by volume, hardening compound mixed @ 2 litre per 50 kg of cement or as per Manufacture's specifications. This includes cost of cement slurry, but excluding the cost of nosing of steps etc. complete	75.00	SQMT	1224.92	91869.00	91869.00
11.0 2	DSR 11.3-Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement, including cement slurry, but excluding the cost of nosing of steps etc. complete.-40 mm thick with 20 mm nominal size stone aggregate	2500.00	SQMT	706.33	1765825.00	1765825.00
11.0 3	DSR 8.31- Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete.	220.00	SQMT	1458.14	320790.80	320790.80
11.0 4	DSR 11.37A Providing and fixing 1st quality ceramic glazed floor tiles conforming to IS : 15622 (thickness to be specified by the manufacturer) of approved make in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge in skirting, risers of steps and dados over 12 mm thick bed of cement Mortar 1:3 (1 cement: 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm including pointing in white cement mixed with pigment of matching shade complete	60.00	SQMT	1279.61	76776.60	76776.60
11.0 5	DSR 11.41.2 Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS: 15622, of approved make, in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand), jointing with grey cement slurry @ 3.3 kg/ sqm including grouting the joints with white cement and matching pigments etc., complete. Size of Tile 600x600 mm	365.00	SQMT	1786.47	652061.55	652061.55
11.0 6	DSR 11.41.A3.1 Providing and laying Vitrified tiles in floor in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS:15622, of approved brand & manufacturer, in all colours and shade, laid on 20 mm thick cement mortar 1:4 (1 cement: 4 coarse sand) jointing with grey cement slurry @3.3 kg/sqm including grouting the joints with white cement and matching pigments etc. The tiles must be cut with the zero chipping diamond cutter only . Laying of tiles will be done with the notch trowel, plier, wedge, clips of required thickness, leveling system and rubber mallet for placing the tiles gently and easily. 11.41A.3.1 Size of Tile 600 x 600 mm	25.00	SQMT	1684.58	42114.50	42114.50
11.0 7	DSR 16.68 Providing and laying 60mm thick factory made cement concrete interlocking paver block of M -30 grade made by block making machine with strong vibratory compaction, of approved size, design & shape, laid in	1465.00	SQMT	1117.80	1637577.00	1637577.00

	required colour and pattern over and including 50mm thick compacted bed of coarse sand, filling the joints with fine sand etc. all complete as per the direction of Engineer-in-charge.					
11.0 8	DSR 16.69 Providing and laying at or near ground level factory made kerb stone of M-25 grade cement concrete in position to the required line, level and curvature, jointed with cement mortar 1:3 (1 cement: 3 coarse sand), including making joints with or without grooves (thickness of joints except at sharp curve shall not be more than 5mm), including making drainage opening wherever required complete etc. as per direction of Engineer-in-charge (length of finished kerb edging shall be measured for payment). (Precast C.C. kerb stone shall be approved by Engineer-in-charge). Size 450mmx450mmx150mm	30.00	CUM	5764.55	172936.50	172936.50
11.0 9	MR Providing and laying 300 mm thick granular sub base for hard strand (size of soling 60mm-150mm)	286.00	CUM	1035.00	296010.00	296010.00
12	PLASTERING					
12.0 1	DSR 13.6.1 20 mm cement plaster of mix : 1:4 (1 cement: 4 coarse sand)	985.00	SQMT	560.51	552102.35	552102.35
12.0 2	DSR 13.5 15 mm cement plaster on rough side of single or half brick wall of mix: 1:4 (1 cement: 4 coarse sand)	950.00	SQMT	473.51	449834.50	449834.50
13	PAINTING					
13.0 1	DSR 13.83.2 Wall painting with premium acrylic emulsion paint of interior grade, having VOC (Volatile Organic Compound) content less than 50 grams/ litre of approved brand and manufacture, including applying additional coats wherever required to achieve even shade and colour. Two Coats	1585.00	SQMT	164.22	260288.70	260288.70
13.0 2	DSR 13.85.3 Applying priming coats with primer of approved brand and manufacture, having low VOC (Volatile Organic Compound) content With water thinnable cement primer on wall surface having VOC content less than 50 grams/litre	2925.00	SQMT	85.04	248742.00	248742.00
13.0 3	DSR 13.48A.1 Finishing walls with 100% Premium acrylic emulsion paint having VOC less than 50 gm/litre and UV resistance as per IS 15489:2004, Alkali & fungal resistance, dirt resistance exterior paint of required shade (Company Depot Tinted) with silicon additives. New work (Two or more coats applied @ 1.43 litre/ 10sqm. Over and including priming coat of exterior primer applied @ 0.90 litre/10 sqm.	1350.00	SQMT	177.62	239787.00	239787.00
13.0 4	MR-Finishing with Epoxy paint (two or more coats) at all locations prepared and applied as per manufacturer's specifications preparation of surface, etc. complete ON STEEL WORK	7650.00	SQMT	261.05	1997032.50	1997032.50
14	UPVC WINDOWS					
14.0 1	DSR 9.147A.3 Providing and fixing factory made uPVC white colour cement/casement cum fixed glazed windows comprising of uPVC multi-chambered frame, sash and mullion (where ever required) extruded profiles duly reinforced with 1.60 ± 0.2 mm thick galvanized mild steel section made from roll forming process of required length (shape & size according to uPVC profile), uPVC extruded glazing beads of appropriate dimension, EPDM gasket, stainless steel (SS 304 grade) friction hinges, zinc alloy (white powder coated) casement handles, G.I fasteners 100 x 8 mm size for fixing frame to finished wall, plastic packers, plastic	65.00	SQMT	11072.89	719737.85	719737.85

	caps and necessary stainless steel screws etc. Profile of frame & sash shall be mitred cut and fusion welded at all corners, mullion (if required) shall be also fusion welded including drilling of holes for fixing hardware's and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of required size and of approved quality, all complete as per approved drawing & direction of Engineer-in-Charge. (Single / double glass panes and silicon sealant shall be paid separately). Variation in profile dimension in higher side shall be accepted but no extra payment on this account shall be made. Note: For uPVC frame, sash and mullion extruded profiles minus 5% tolerance in dimension i.e. in depth & width of profile shall be acceptable. Casement window double panels with top fixed with S.S. friction hinges (350 x 19 x 1.9 mm) made of (small series) frame 47 x 50 mm, sash 47 x 68 mm & mullion 47 x 68 mm all having wall thickness of 1.9 ± 0.2 mm and single glazing bead of appropriate dimension. (Area of window up to 2.50 sqm).					
15	UPVC DOORS					
15.0 1	DSR 9.147C.2 Providing and fixing factory made uPVC white colour casement/ Casement cum fixed glazed door comprising of uPVC multi-chambered frame, sash and mullion (where ever required) extruded profiles duly reinforced with 1.60 ± 0.2 mm thick galvanized mild steel section made from roll forming process of required length (shape & size according to uPVC profile), uPVC extruded glazing beads of appropriate dimension, EPDM gasket, zinc alloy (white powder coated) 3D hinges and one handle on each side of panels along with zinc plated mild steel multi point locking having transmission gear, cylinder with keeps and one side key, G.I fasteners 100 x 8 mm size for fixing frame to finished wall and necessary stainless steel screws, etc. Profile of frame & sash shall be mitred cut and fusion welded at all corners, mullion (if required) shall be also fusion welded including drilling of holes for fixing hardware's and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of required size and of approved quality, all complete as per approved drawing & direction of Engineer-in-Charge. (Single / double glass panes and silicon sealant shall be paid separately). Variation in profile dimension in higher side shall be accepted but no extra payment on this account shall be made: Note: For uPVC frame, sash and mullion extruded profiles minus 5% tolerance in dimension i.e. in depth & width of profile shall be acceptable: Casement door with top hung ventilator with 3D and S.S. friction hinges (400 x 19 x 1.9 mm) made of (big series) frame 67 x 64 mm, sash 67 x 110 mm & mullion 67 x 80 mm all having wall thickness of 2.3 ± 0.2 mm and single glazing bead / double glazing bead of appropriate dimension.(Area of door up to 2.50 sqm)	30.00	SQMT	12019.74	360592.20	360592.20
16	FALSE CEILING					
16.0 1	Providing and Fixing 15 mm thick densified tegular edged eco friendly light weight calcium silicate false ceiling tiles of approved texture of size 595 x 595 mm in true horizontal level, suspended on inter locking metal grid of hot dipped	465.00	SQMT	1976.51	919077.15	919077.15

	galvanised steel sections (galvanising @ 120 grams per sqm including both side) consisting of main 'T' runner suitably spaced at joints to get required length and of size 24x38 mm made from 0.33 mm thick (minimum) sheet, spaced 1200 mm centre to centre, and cross "T" of size 24x28 mm made out of 0.33 mm (Minimum) sheet, 1200 mm long spaced between main 'T' at 600 mm centre to centre to form a grid of 1200x600 mm and secondary cross 'T' of length 600 mm and size 24 x28 mm made of 0.33 mm thick (Minimum) sheet to be inter locked at middle of the 1200x 600 mm panel to from grid of size 600x600 mm, resting on periphery walls /partitions on a Perimeter wall angle pre-coated steel of size(24x24X3000 mm made of 0.40 mm thick (minimum) sheet with the help of rawl plugs at 450 mm centre to centre with 25 mm long dry wall screws @ 230 mm interval and					
17	DSR 16.7 Providing and fixing G.I. chain link fabric fencing of required width in mesh size 50x50 mm including strengthening with 2 mm dia wire or nuts, bolts and washers as required complete as per the direction of Engineer-in-charge. Made of G.I. wire of dia. 4 mm, PVC coated to achieve outer dia not less than 5 mm in required colour and shade	150.00	SQMT	1036.90	155535.00	155535.00
18	MR Providing and fixing 15x15x210 cm boundary stone of hard stone (cost of excavation, refilling and concrete etc. to be paid for separately)	100.00	SQMT	805.00	80500.00	80500.00
19	DSR 21.2.2 Providing and fixing powder coated aluminium work (minimum thickness of powder coating 50 micron) consisting of tee/ angle sections, of approved make conforming to IS : 733 in frames of false ceiling including aluminium angle cleats with necessary C.P. brass/ stainless steel sunk screws, aluminium perimeter angles fixed to wall with stainless steel rawl plugs @ 450 mm centre to centre and fixing the frame work to G.I. level adjusting hangers 6 mm dia. with necessary cadmium plated machine screws all complete as per approved architectural drawings and direction of the Engineer-in-charge (level adjusting hangers, ceiling cleats and expansion hold fasteners to be paid for separately)	200.00	KG	939.72	187944.00	187944.00
20	DSR 21.2 Providing and fixing 12 mm thick prelaminated particle board flat pressed three layer or graded wood particle board conforming to IS: 12823 Grade I Type II, in panelling fixed in aluminum doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings and directions of engineer-in-charge . Pre-laminated particle board with decorative lamination on both sides	60.00	SQMT	1282.71	76962.60	76962.60
21	DSR 21.3.1. Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge . (Cost of aluminium snap beading shall be paid in basic item): With float glass panes of 4.0 mm thickness (weight not less than 10kg/sqm)	60.00	SQMT	1353.32	81199.20	81199.20
22	DSR 21.4.2 Providing and fixing double action hydraulic floor spring of approved brand and manufacture conforming to IS : 6315, having brand logo embossed on the body / plate with double spring mechanism and door weight up to 125	4.00	NOS	3411.02	13644.08	13644.08

	kg, for doors, including cost of cutting floors, embedding in floors as required and making good the same matching to the existing floor finishing and cover plates with brass pivot and single piece M.S. sheet outer box with slide plate etc. complete as per the direction of Engineer in-charge. With brass cover plate minimum 1.25 mm thickness					
23	HDPE LINER					
23.0 1	MARKET RATE- Providing and fabrication of 1.0mm or 1000 GSM HDPE Smooth Geomembrane (Black). Black-pigmented, ultra-smooth HDPE geomembrane engineered for superior resilience and performance under rigorous operational conditions, particularly within aquaculture systems	2500.00	SQMT	450.00	1125000.00	1125000.00
23.0 2	MARKET RATE-Horizontal and vertical G.I pipes both ways 40mm dia G.I Pipes at the interval of 600mm alround as per the detailed drawings, Vertical support pipes are to be installed at precise intervals, extending to a minimum depth of 0.5 feet below the ground surface. These pipes must be securely anchored within a foundation of high-strength concrete, designed to provide maximum resistance against soil displacement and environmental stressors. The concrete mix should be carefully prepared with an optimized water-cement ratio to achieve superior compaction and curing, ensuring that the pipes remain rigidly fixed and capable of withstanding dynamic loads and environmental fluctuations over an extended operational lifespan.	2300.00	KG	450.00	1035000.00	1035000.00
23.0 3	MARKET RATE- Removal, re-laying, and welding of the existing 1000-micron thick HDPE liner sheet using a combi-wedge welding machine, including necessary arrangements, alignment, and complete finishing of the work	500.00	RM	200.00	100000.00	100000.00
23.0 4	MARKET RATE- Providing and fixing 15 cm wide, 45 cm overall semi-circular PVC/UPVC Rain water gutter with iron brackets 40x3 mm size, bolts, nuts and washers etc., including making necessary connections with rain water pipes at suitable intervals complete	200.00	RM	1100.00	220000.00	220000.00
24	SANITARY PLUMBING WORKS					
24.0 1	DSR 17.7.1 Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require: White Vitreous China Wash basin size 630x450 mm with a pair of 15 mm C.P. brass pillar taps	8.00	EACH	3046.18	24369.44	24369.44
25	DSR 17.22 A Providing and fixing CP Brass 32mm size Bottle Trap of approved quality & make and as per the direction of Engineer-in-charge.	8.00	EACH	1190.02	9520.16	9520.16
26	DSR 17.3 Providing and fixing white vitreous china pedestal type water closet (European type) with seat and lid, 10 litre low level white vitreous china flushing cistern & C.P. flush bend with fittings & C.I. brackets, 40 mm flush bend, overflow arrangement with specials of standard make and mosquito proof coupling of approved municipal design complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required W.C. pan with ISI marked white solid plastic seat and lid	8.00	EACH	9206.90	73655.20	73655.20
26.0 1	DSR 18.51.1 Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms: 15 mm nominal bore	8.00	EACH	918.79	7350.32	7350.32

27	DSR 18.49.1 Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms 15 mm nominal bore	8.00	EACH	582.82	4662.56	4662.56
28	DSR 18.53.1 Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931. 15mm nominal bore	8.00	EACH	660.45	5283.60	5283.60
29	DSR 17.73 Providing and fixing PTMT towel rail complete with brackets fixed to wooden cleats with CP brass screws with concealed fittings arrangement of approved quality and colour 600 mm long towel rail with total length of 645 mm, width 78 mm and effective height of 88 mm, weighing not less than 190 gms	8.00	EACH	815.29	6522.32	6522.32
30	DSR 17.34.1 Providing and fixing toilet paper holder : C.P. brass	8.00	EACH	924.26	7394.08	7394.08
31	DSR 17.71 Providing and fixing PTMT liquid soap container 109 mm wide, 125 mm high and 112 mm distance from wall of standard shape with bracket of the same materials with snap fittings of approved quality and colour, weighing not less than 105 gms	8.00	EACH	193.60	1548.80	1548.80
32	DSR 17.16 A Providing and fixing 8 mm dia C.P. / S.S. Jet with flexible tube upto 1 metre long with S.S. triangular plate to European type W.C. of quality and make as approved by Engineer - in - charge.	8.00	EACH	401.52	3212.16	3212.16
33	DSR 17.24 Providing and fixing white vitreous china squatting plate urinal with integral rim longitudinal flush pipe	2.00	EACH	4655.49	9310.98	9310.98
34	DSR 19.4.3.1 Providing and fixing square-mouth S.W. gully trap class SP-1 complete with C.I. grating brick masonry chamber with water tight C.I. cover with frame of 300 x300 mm size (inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70 kg as per standard design: 180x150 mm size P type: With common burnt clay F.P.S. (non modular)bricks of class designation 7.5	8.00	EACH	3222.47	25779.76	25779.76
35	DSR 19.2 Supplying and fixing C.I. cover 300x300 mm without frame for gully trap (standard pattern) the weight of cover to be not less than 4.5 kg	8.00	EACH	905.05	7240.40	7240.40
36	DSR 17.22B Providing and fixing CP Brass Single lever telephonic wall mixer of quality & make as approved by Engineer in charge.	8.00	EACH	7981.86	63854.88	63854.88
37	DSR 18.58.2.1 Providing and fixing PTMT grating of approved quality and colour. Rectangular type with openable circular lid: 150 mm nominal size square 100 mm diameter of the inner hinged round grating	8.00	EACH	226.49	1811.92	1811.92
39	DSR 18.22.2 Providing and fixing C.P. brass shower rose with 15 or 20 mm inlet : 150 mm diameter	8.00	EACH	255.70	2045.60	2045.60
40	DSR 18.52 Providing and fixing C.P. brass stop cock (concealed) of standard design and of approved make conforming to IS:8931	8.00	EACH	771.02	6168.16	6168.16
41	MARKET RATE- Providing and fixing Floor trap standard design and of approved make conforming to IS:8931	8.00	EACH	1200.00	9600.00	9600.00
42	MARKET RATE-Providing and fixing mirror of superior glass (of approved quality) and of required shape and size with plastic moulded frame of approved make and shade with 6 mm thick hard board backing : Rectangular shape 650x450mm	8.00	EACH	2000.00	16000.00	16000.00
43	AQUACULTURE PLUMBING WORK					
44	MARKET RATE- Supplying and fixing in position best					

	quality PVC pressure pipes of sea water supply of various size having ISI mark, with 16 Kgs of pressure, non corrosive and non contact with the salt water of Conforming the IS 4985 : 2000 and providing leak proof joints including fixing to the wall specials PVC Clamps, etc and making connection to fittings, dismantling masonry /RCC work wherever necessary and making good the dismantled portion to the original condition. IS -4985,DIN -8062.					
44.0 1	25 mm dia 16 kgf/cm ² PVC pipe	800.00	RMT	102.00	81600.00	81600.00
44.0 2	32 mm dia. 16 kgf/cm ² PVC Pipe	850.00	RMT	155.00	131750.00	131750.00
44.0 3	50 mm dia 16 kgf/cm ² PVC Pipe	90.00	RMT	228.00	20520.00	20520.00
44.0 4	90 mm dia. 10 kgf/cm ² PVC Pipe	120.00	RMT	441.00	52920.00	52920.00
44.0 5	110mm dia. 10 kgf/cm ² PVC pipes.	700.00	RMT	649.00	454300.00	454300.00
44.0 6	140 mm dia 6 kgf/cm ² pvc pipe.	20.00	RMT	689.00	13780.00	13780.00
44.0 7	160mm dia 6 kgf/cm ² s PVC pipes.	450.00	RMT	848.00	381600.00	381600.00
44.0 8	200 mm dia 6 kgf/cm ² pvc pipes	66.00	RMT	1262.00	83292.00	83292.00
44.0 9	250mm dia. 6 kgf/cm ² PVC Pipes	66.00	RMT	1914.00	126324.00	126324.00
44.1	300 mm dia 6 kgf/cm ² PVC Pipe	140.00	RMT	3054.00	427560.00	427560.00
44.1 1	63mm dia. 6 kgf/cm ² s PVC Pipe	120.00	RMT	185.00	22200.00	22200.00
45	MARKET RATE- Providing and fixing Chlorinated Polyvinyl chloride(CPVC) pipes having thermal stability for sea water supply ,including all CPVC plain threaded fittings, including fixing the pipe with clamps at 1.00m spacing this includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of engineer in charge.					
45.0 1	25mm CPVC pipe	60.00	RMT	240.00	14400.00	14400.00
45.0 2	32 mm CPVC pipe	30.00	RMT	393.00	11790.00	11790.00
45.0 3	50 mm CPVC pipe	30.00	RMT	880.00	26400.00	26400.00
45.0 4	90 mm CPVC pipe	90.00	RMT	1983.00	178470.00	178470.00
46	MARKET RATE- Providing and fixing u-PVC pipes having thermal stability for sea water supply ,including all u-PVC plain threaded fittings, including fixing the pipe with clamps at 1.00m spacing this includes jointing of pipes & fittings with one step u-PVC solvent cement and testing of joints complete as per direction of engineer in charge.					
46.0 1	25mm u-PVC pipe	60.00	RMT	240.00	14400.00	14400.00
46.0 2	32 mm u-PVC pipes	30.00	RMT	393.00	11790.00	11790.00
46.0 3	50 mm u-PVC pipes	30.00	RMT	880.00	26400.00	26400.00
46.0	63 mm u-PVC pipes	30.00	RMT	1580.00	47400.00	47400.00

4						
46.0 5	90 mm u-PVC pipes	90.00	RMT	1983.00	178470.00	178470.00
47	MARKET RATE- Supply and fixing of PVC ELBOW complete all using to fix the same in the pipe using the emery sheet with using the solvent to fix the same complete all.					
47.0 1	25 mm dia	70.00	EACH	22.00	1540.00	1540.00
47.0 2	32 mm dia	70.00	EACH	28.00	1960.00	1960.00
47.0 3	50 mm dia	70.00	EACH	59.00	4130.00	4130.00
47.0 4	63 mm dia	40.00	EACH	89.00	3560.00	3560.00
47.0 5	90 mm dia	60.00	EACH	253.00	15180.00	15180.00
47.0 6	110mm dia	40.00	EACH	367.00	14680.00	14680.00
47.0 7	160mm dia	25.00	EACH	644.00	16100.00	16100.00
47.0 8	200mm dia	20.00	EACH	1262.00	25240.00	25240.00
47.0 9	250 mm dia	10.00	EACH	2330.00	23300.00	23300.00
48	MARKET RATE- Supply and fixing of PVC TEE complete all using to fix the same in the pipe using the emery sheet with using the solvent to fix the same complete all.					
48.0 1	32 mm dia	60.00	EACH	36.00	2160.00	2160.00
48.0 2	50 mm dia	60.00	EACH	74.00	4440.00	4440.00
48.0 3	63 mm dia	40.00	EACH	109.00	4360.00	4360.00
48.0 4	90 mm dia	50.00	EACH	325.00	16250.00	16250.00
48.0 5	110mm dia	40.00	EACH	550.00	22000.00	22000.00
48.0 6	160mm dia	25.00	EACH	963.00	24075.00	24075.00
48.0 7	200mm dia	10.00	EACH	1665.00	16650.00	16650.00
48.0 8	250mm dia	10.00	EACH	3119.00	31190.00	31190.00
49	MARKET RATE- Supply and fixing of PVC reducer union complete all using to fix the same in the pipe using the emery sheet with using the solvent to fix the same complete all.					
49.0 1	63 /25 mm dia	10.00	EACH	59.00	590.00	590.00
49.0 2	63 /32 mm dia	15.00	EACH	59.00	885.00	885.00
49.0 3	50 / 32 mm dia	20.00	EACH	37.00	740.00	740.00
49.0 4	110 /50 mm dia	20.00	EACH	140.00	2800.00	2800.00
49.0 5	110/63 mm dia	20.00	EACH	130.00	2600.00	2600.00
49.0	250/160 mm dia	20.00	EACH	1307.00	26140.00	26140.00

6						
49.0 7	200/160 mm dia	20.00	EACH	586.00	11720.00	11720.00
49.0 8	250/200 mm dia	20.00	EACH	1320.00	26400.00	26400.00
49.0 9	160/110mm dia	30.00	EACH	331.00	9930.00	9930.00
49.1	110/90mm dia	30.00	EACH	59.00	1770.00	1770.00
50	MARKET RATE-Supply and fixing of PVC end cap complete all using to fix the same in the pipe using the emery sheet with using the solvent to fix the same complete all.					
50.0 1	25 mm dia	20.00	EACH	11.00	220.00	220.00
50.0 2	32 mm dia	20.00	EACH	15.00	300.00	300.00
50.0 3	50 mm dia	20.00	EACH	29.00	580.00	580.00
50.0 4	63 mm dia	20.00	EACH	46.00	920.00	920.00
50.0 5	90 mm dia	20.00	EACH	84.00	1680.00	1680.00
50.0 6	110mm dia	20.00	EACH	120.00	2400.00	2400.00
50.0 7	250mm dia	20.00	EACH	926.00	18520.00	18520.00
51	MARKET RATE- Supply and fixing of PVC reducer TEE complete all using to fix the same in the pipe using the emery sheet with using the solvent to fix the same complete all.					
51.0 1	63 /25 mm dia	20.00	EACH	128.00	2560.00	2560.00
51.0 2	63 /32 mm dia	20.00	EACH	130.00	2600.00	2600.00
51.0 3	50 / 32 mm dia	20.00	EACH	70.00	1400.00	1400.00
51.0 4	110 /50 mm dia	20.00	EACH	245.00	4900.00	4900.00
51.0 5	110/63 mm dia	20.00	EACH	245.00	4900.00	4900.00
51.0 6	250/160 mm dia	20.00	EACH	1107.00	22140.00	22140.00
51.0 7	200/160 mm dia	20.00	EACH	1583.00	31660.00	31660.00
51.0 8	250/200 mm dia	20.00	EACH	1205.00	24100.00	24100.00
51.0 9	110/90 mm dia	30.00	EACH	328.00	9840.00	9840.00
51.1	160/110 mm dia	20.00	EACH	696.00	13920.00	13920.00
52	MARKET RATE- Supply and fixing of PVC MT/FTA complete all using to fix the same in the pipe using the emery sheet with using the solvent to fix the same complete all					
52.0 1	25 mm dia	20.00	EACH	19.00	380.00	380.00
52.0 2	32 mm dia	20.00	EACH	27.00	540.00	540.00
52.0 3	50 mm dia	20.00	EACH	43.00	860.00	860.00
52.0	110 mm dia	20.00	EACH	178.00	3560.00	3560.00

4						
52.0 5	63 mm dia	20.00	EACH	59.00	1180.00	1180.00
52.0 6	160 mm dia	20.00	EACH	329.00	6580.00	6580.00
52.0 7	200 mm dia	20.00	EACH	75.00	1500.00	1500.00
52.0 8	250 mm dia	20.00	EACH	100.00	2000.00	2000.00
52.0 9	90 mm dia	20.00	EACH	116.00	2320.00	2320.00
53	MARKET RATE- Supply and fixing of 10 kgs of PVC Ball valve with complete all					
53.0 1	32 mm dia PVC Ball valve	30.00	EACH	250.00	7500.00	7500.00
53.0 2	50 mm dia pvc ball valve	30.00	EACH	400.00	12000.00	12000.00
53.0 3	90 (80 mm) mm dia PVC Valve	30.00	EACH	1300.00	39000.00	39000.00
53.0 4	110 (100) mm dia PVC Valve	30.00	EACH	2350.00	70500.00	70500.00
54	MARKET RATE-Supply and fixing of PVC foot cum check valve complete all using to fix the same in the pipe using the emery sheet with using the solvent to fix the same complete all.					
54.0 1	50 /63 mm dia	10.00	EACH	2650.00	26500.00	26500.00
54.0 2	110 mm dia	10.00	EACH	3300.00	33000.00	33000.00
55	MARKET RATE-Supply and fixing of PVC Non return valve complete all using to fix the same in the pipe using the emery sheet with using the solvent to fix the same complete all.					
55.0 1	50 /63 mm dia	10.00	EACH	2650.00	26500.00	26500.00
55.0 2	110 mm dia	10.00	EACH	4300.00	43000.00	43000.00
56	MARKET RATE-Supply and fixing of 300 mm dia air diffuser in disk model complete, coverage area of 3 to 6 sqm minimum of 1.8 water depth complete all.	100.00	EACH	400.00	40000.00	40000.00
57	MARKET RATE- Supply and fixing of High rigid PVC white colour butterfly valve , PVC Hubs, ABS body, center shaft will be no corrosive 304SS, Paddle -304SS, seals - Sarlink or equivalent withstand pressure of 10, with both side connecting pipe complete all.					
57.0 1	110mm PVC butterfly valve	20.00	EACH	3100.00	62000.00	62000.00
57.0 2	160mm PVC butterfly valve	5.00	EACH	4800.00	24000.00	24000.00
57.0 3	200mm PVC butterfly valve	5.00	EACH	8000.00	40000.00	40000.00
58	Supply and fixing of pvc flanges with SS bolts and nuts with water leak gasket to be provided complete all.					
58.0 1	Flanges for 110 mm dia	40.00	EACH	569.00	22760.00	22760.00
58.0 2	Flanges for 250 mm dia	30.00	EACH	150.00	4500.00	4500.00

58.0 3	Flanges for 160 mm dia	30.00	EACH	790.00	23700.00	23700.00
59	MARKET RATE-Supply and fixing of u-PVC/CPVC TEE complete all using to fix the same in the pipe using the emery sheet with using the solvent to fix the same complete all.					
59.0 1	25 mm dia	20.00	EACH	72.00	1440.00	1440.00
59.0 2	32 mm dia	20.00	EACH	150.00	3000.00	3000.00
59.0 3	50 mm dia	20.00	EACH	521.00	10420.00	10420.00
59.0 4	63 mm dia	20.00	EACH	1053.00	21060.00	21060.00
60	MARKET RATE-Supply and fixing of u-PVC/CPVC Elbow complete all using to fix the same in the pipe using the emery sheet with using the solvent to fix the same complete all.					
60.0 1	25 mm dia	20.00	EACH	55.00	1100.00	1100.00
60.0 2	32 mm dia	20.00	EACH	117.00	2340.00	2340.00
60.0 3	50 mm dia	20.00	EACH	408.00	8160.00	8160.00
60.0 4	63 mm dia	20.00	EACH	750.00	15000.00	15000.00
61	MARKET RATE-Supply and fixing of u-PVC/CPVC MTA/FTA complete all using to fix the same in the pipe using the emery sheet with using the solvent to fix the same complete all.					
61.0 1	25 mm dia	20.00	EACH	52.00	1040.00	1040.00
61.0 2	32 mm dia	20.00	EACH	90.00	1800.00	1800.00
61.0 3	50 mm dia	20.00	EACH	227.00	4540.00	4540.00
61.0 4	63 mm dia	20.00	EACH	533.00	10660.00	10660.00
62	MARKET RATE-Supply and fixing of u-PVC/CPVC Ball valve complete all using to fix the same in the pipe using the emery sheet with using the solvent to fix the same complete all.					
62.0 1	25 mm dia	20.00	EACH	467.00	9340.00	9340.00
62.0 2	32 mm dia	20.00	EACH	737.00	14740.00	14740.00
62.0 3	50 mm dia	20.00	EACH	1200.00	24000.00	24000.00
62.0 4	63 mm dia	20.00	EACH	1500.00	30000.00	30000.00
63	MARKET RATE-Supply and fixing of u-PVC/CPVC End cap complete all using to fix the same in the pipe using the emery sheet with using the solvent to fix the same complete all.					
63.0 1	25 mm dia	20.00	EACH	35.00	700.00	700.00
63.0 2	32 mm dia	20.00	EACH	72.00	1440.00	1440.00
63.0 3	50 mm dia	20.00	EACH	208.00	4160.00	4160.00

63.0 4	63 mm dia	20.00	EACH	370.00	7400.00	7400.00
64	MARKET RATE-Supply and fixing of L shaped HDPE stand support of size 600mmx12mm on both ways to fix on walls above floor level of 2.5 meters high,. PVC/CPVC/U-PVC pipes carrying sea water to run on top of the support, The L support to be fixed in wall using 12mm dia 100 mm length anchor bolts	200.00	EACH	1800.00	360000.00	360000.00
65	MARKET RATE-Supply and erection of beach bore- 3 nos of suitable interval of 4 inch 6 Kgf/sq.cm PVC pipes and fittings 20 feet deep. The PVC pipe shall be slotted with 15 feet length at the bottom of bore covered with nylon mesh near to sea waves with necessary earth work using hydraulic excavator and required redsand for back filling during boring. The three nos of delivery of pipe shall be connected to 10HP intake pumps for a length of approximately 45 meters with all necessary pipes and fittings and 4 inch Non return valve complete finishing of work with all materials	3.00	EACH	95000.00	285000.00	285000.00
66	ELECTRICAL WORKS					
66.0 1	CPWD DSR (E&M 2022) 2.5.2 Supplying and Fixing of following Ways surface/recess Mounting Vertical Type 415V TPN MCB Distribution board of sheet steel, Dust Protected,Duly Powder painte,inclusive of 200A tinned Copper busbar,Common neutral link,Earth bar,din bar for mounting MCBs(But without MCBs and incomer) as required.(Note Vertical type MCB TPDB is normally used where 3 Phase Out lets are required)					
66.0 2	CPWD DSR (E&M 2022) 2.5.2 8 Way (4+24),Double Door	1.00	Nos	11689.75	11689.75	11689.75
67	Market Rate Supply and Fixing 63A Pole rating 240/415V,10 kA, "C' curve,miniature Circuit Breaker suitable for inductive load of following poles in the existing MCB DB complete with connections,testing and commissioning etc. as required	1.00	Nos	2300.00	2300.00	2300.00
68	CPWD DSR (E&M 2022) 2.10 Supply and Fixing 32A rating 240/415V,10 kA, "C' curve,miniature Circuit Breaker suitable for inductive load of following poles in the existing MCB DB complete with connections,testing and comisioning etc. as required					
68.0 1	CPWD DSR (E&M 2022)2.10.4 Tripple Pole	6.00	Nos	1158.05	6948.30	6948.30
69	CPWD DSR (E&M 2022) 2.10 Supply and Fixing 10 A rating 240/415V,10 kA, "C' curve,miniature Circuit Breaker suitable for inductive load of following poles in the existing MCB DB complete with connections,testing and comissioning etc. as required					
69.0 1	CPWD DSR (E&M 2022) 2.10.1 Single Pole	4.00	Nos	294.40	1177.60	1177.60
70	Market Rate Supply and Laying of 16 Sq.mm 4 Core PVC Sheathed ,XLPE Insulated Multi Core Bright Annealed Bare Copper Conductor Heavy duty Armoured Industrial Cable For Voltage up to 1100 Volts as per the IS:694:1990 with supply and Installation of Suitable Cable gland and suitable Copper Lug and End termination etc that cable to be lay through PVC conduit 32 mm and supply of PVC pipe ,PVC Bend,PVC Clamp and installation of Clamp and accsories included etc.	55.00	Meter	2500.00	137500.00	137500.00
71	CPWD DSR (E&M 2022) 7.1 Laying One number PVC					

	insulated and PVC Sheathed /XLPE power cable of 1.1 KV grade of following size direct in ground including excavation,sand cushioning,Protective covering and refilling the trench etc as required					
71.0 1	CPWD DSR (E&M 2022) 7.1.1 Upto 35 Sqmm	55.00	Meter	445.05	24477.75	24477.75
72	Market Rate Supply and Laying of 4 Sq.mm 3 Core PVC Sheathed ,XLPE Insulated Multi Core Bright Annealed Bare Copper Conductor Heavy duty Armoured Industrial Cable For Voltage up to 1100 Volts as per the IS:694:1990 with supply and Installation of Suitable Cable gland and suitable Copper Lug and End termination etc, that cable to be lay through PVC conduit 32 mm and supply of PVC pipe ,PVC Bend,PVC Clamp and installation of Clamp and accsories included etc.	50.00	Meter	750.00	37500.00	37500.00
73	Market Rate: Removal of Existing 2HP-10HP Starter 1 Nos and remove the connection and Providing and Fixing the 63A TPN SDF Capacity TP&N disconnector Fuse switch Unit inside the Existing Panel Board with ISI Marked HRC Fuses including Drilling holes in Cubicle Panel,Making Connections by suitable cable with proper Insullation and remove the Indicaion Lamps and Cover the Indication Lamp slotted Area by proper arrangemnts and removal of Existing 32A TPN Swicth and make the arrangements to fix the 63A TPN SDF with providing the proper safety arrangements etc as required supply and installation of suitable HRC Fuse rating 63A	1.00	Nos	10000.00	10000.00	10000.00
74	Market Rate: Supply Installation and Commissioning of 10 HP Wall Mounted Star Delta Starter for 10 HP ,3 phase 415Volt,50Hz Motor Starter with Analog Voltmeter,Analog Ammeter,Insulated Material push buttons,Indication Lamps with Suitable ORL relay and suitable Contactors including the Wall mounting arrangements and Earthing Connections and End Termination work included from Existing DB to Starter and Starter to Motor with available cables in Motor with Suply of Suitable Cable Lugs and cable Gland also included and etc as required (Motor To Starter Cable Supply Not in the Scope) (Starter warranty-1 Year)	2.00	Nos	20000.00	40000.00	40000.00
75	Market Rate Supply Installation and Commissioning of 5 HP Wall Mounted Star Delta Starter for 5 HP ,3 phase 415Volt,50Hz Motor Starter with Analog Voltmeter,Analog Ammeter,Insulated Material push buttons,Indication Lamps with Suitable ORL relay and suitable Contactors including the Wall mounting arrangements and Earthing Connections and End Termination work included from Existing DB to Starter and Starter to Motor with available cables in Motor with Suply of Suitable Cable Lugs and cable Gland also included and etc as required (Motor To Starter Cable Supply Not in the Scope) (Starter make should be L&T,Seimens,ABB,Crompton) (Starter warranty-1 Year)	1.00	Nos	9000.00	9000.00	9000.00
76	Market Rate: Removal of Existing 2HP-10HP Starter 1 Nos and remove the connection and Providing and Fixing the 63A TPN SDF Capacity TP&N disconnector Fuse switch Unit inside the Existing Panel Board with ISI Marked HRC Fuses including Drilling holes in Cubicle Panel,Making Connections by suitable cable with proper Insullation and remove the Indicaion Lamps and Cover the Indication Lamp slotted Area by proper arrangemnts and removal of Existing	2.00	Nos	10000.00	20000.00	20000.00

	32A TPN Swicth and make the arrangements to fix the 63A TPN SDF with providing the proper safety arrangements etc as required supply and installation of suitable HRC Fuse rating 63A					
77	CPWD DSR (E&M 2022) 2.5.2 Supplying and Fixing of following Ways surface/recess Mounting Vertical Type 415V TPN MCB Distribution board of sheet steel, Dust Protected,Duly Powder painte,inclusive of 200A tinned Copper busbar,Common neutral link,Earth bar,din bar for mounting MCBs(But without MCBs and incomer) as required.(Note Vertical type MCB TPDB is normally used where 3 Phase Out lets are required)					
77.0 1	CPWD DSR (E&M 2022) 2.5.2 8 Way (4+24),Double Door	1.00	Nos	11689.75	11689.75	11689.75
78	Market Rate: Supply and Fixing 63A 4 Pole rating 240/415V,10 kA, "C' curve,miniature Circuit Breaker suitable for inductive load of following poles in the existing MCB DB complete with connections,testing and commissioning etc. as required (Mark ISI) Make: Legrand/Schneider/L&T/Seimens	1.00	Nos	2300.00	2300.00	2300.00
79	CPWD DSR (E&M 2022) 2.10 Supply and Fixing 32A rating 240/415V,10 kA, "C' curve,miniature Circuit Breaker suitable for inductive load of following poles in the existing MCB DB complete with connections,testing and comissioning etc. as required					
79.0 1	CPWD DSR (E&M 2022) 2.10.4 Triple Pole	8.00	Nos	1158.05	9264.40	9264.40
80	CPWD DSR (E&M 2022) 2.10 Supply and Fixing 10 A rating 240/415V,10 kA, "C' curve,miniature Circuit Breaker suitable for inductive load of following poles in the existing MCB DB complete with connections,testing and comisioning etc. as required					
80.0 1	CPWD DSR (E&M 2022) 2.10.1 Single Pole	10.00	Nos	294.40	2944.00	2944.00
81	Market Rate: Supply and Laying of 16 Sq.mm 4 Core PVC Sheathed ,XLPE Insulated Multi Core Bright Annealed Bare Copper Conductor Heavy duty Armoured Industrial Cable For Voltage up to 1100 Volts as per the IS:694:1990 with supply and Installation of Suitable Cable gland and suitable Copper Lug and End termination etc that cable to be lay through PVC conduit 32 mm and supply of PVC pipe ,PVC Bend,PVC Clamp and installation of Clamp and accsories included etc.	40.00	Meter	2500.00	100000.00	100000.00
82	CPWD DSR (E&M 2022) 7.1 Laying One number PVC insulated and PVc Sheathed /XLPE power cable of 1.1 KV grade of following size direct in ground including excavation,sand cushioning,Protective covering and refilling the trench etc as required					
82.0 1	CPWD DSR (E&M 2022) 7.1.1 Upto 35 Sqmm	40.00	Meter	445.05	17802.00	17802.00
83	Market Rate: Supply Installation and Commissioning of 20 HP Wall Mounted Star Delta Starter for 20 HP ,3 phase 415Volt,50Hz Motor Starter with Analog Voltmeter,Analog Ammeter,Insulated Material push buttons,Indication Lamps with Suitable ORL relay and suitable Contactors including the Wall mounting arrangements and Earthing Connections and End Termination work included from Existing DB to Starter and Starter to Motor with available cables in Motor	2.00	Nos	20000.00	40000.00	40000.00

	with Suply of Suitable Cable Lugs and cable Gland also included and etc as required (Motor To Starter Cable Supply Not in the Scope)					
84	CPWD DSR (E&M 2022) 5.14 Providing and Fixing 25mm X 5mm Copper strip on Surface or in recess for Connections etc. as required	35.00	Meter	1336.30	46770.50	46770.50
85	CPWD DSR (E&M 2022) 1.7 Wiring for Circuit/Submain wiring along with earth wire with the following sizes of FRLS PVC insulated Copper conductor,Single core cable in Surface/recessed steel conduit as required					
85.0 1	CPWD DSR (E&M 2022)1.7.3 2X4 Sq.mm + 1X 4 sq.mm earth wire	20.00	Meter	424.35	8487.00	8487.00
86	CPWD DSR (E&M 2022) 1.7 Wiring for Circuit/Submain wiring along with earth wire with the following sizes of FRLS PVC insulated Copper conductor,Single core cable in Surface/recessed steel conduit as required					
86.0 1	CPWD DSR (E&M 2022) 1.7.2 2X2.5 Sq.mm + 1X 2.5 sq.mm earth wire	20.00	Meter	424.35	8487.00	8487.00
87	Power Switch Box in New Seawater Intake Pump Room					
87.0 1	CPWD DSR (E&M 2022) 1.27 Supplying and fixing following size/modules,GI box alongwith modular base & Cover plate for modular switches in recess etc. as required					
87.0 2	CPWD DSR (E&M 2022) 1.27.4 6 Module (200mm X75mm)	1.00	Each	462.30	462.30	462.30
88	CPWD DSR (E&M 2022) 1.27 Supplying and fixing following size/modules,GI box alongwith modular base & Cover plate for modular switches in recess etc. as required					
88.0 1	CPWD DSR (E&M 2022) 1.27.4 6 Module (200mm X75mm)	1.00	Each	462.30	462.30	462.30
89	CPWD DSR (E&M 2022)1.26 Supply and Fixing modular blanking plate on the existing modular Plate & Switch Box excluding Modular Plate as required	30.00	Each	46.00	1380.00	1380.00
90	CPWD DSR (E&M 2022)1.24 Supplying and Fixing following Modular Switch/Socket on the existing modular plate & Switch Box including connections but excluding modular plate etc. as required					
90.0 1	CPWD DSR (E&M 2022)1.24.1 5/6 A switch	5.00	Each	118.45	592.25	592.25
90.0 2	CPWD DSR (E&M 2022)1.24.3 15/16A Switch	1.00	Each	179.40	179.40	179.40
90.0 3	CPWD DSR (E&M 2022)1.24.5 6 pin 15/16 A Socket outlet	1.00	Each	226.55	226.55	226.55
91	CPWD DSR (E&M 2022)1.10 Wiring for Light Point/Fan Point/Exhaust fan Point/call bell point with 1.5 Sqmm FRLS PVC Insulated copper conductor single core cable in surface/recessed medium class PVC conduit, with modular switch ,Modular plate,Suitable GI box and Earthing the point with 1.5 Sq.mm FRLS PVC insulated copper conductor single core cable etc. as required					
91.0 1	CPWD DSR (E&M 2022)1.10.3 Group C	3.00	Point	1687.05	5061.15	5061.15
92	Market Rate Supply and Installation and Comissioning of LED Tube light 34/36 W Colour Temperature 6500K Cool day light,Luminous flux 2100 lm 140 -270 Volt AC 50 Hz IP 65 Batten Material Polycarbonate 4 feet Type and Clamp fixing acceesories included Indoor Industrial Application	3.00	Nos	3000.00	9000.00	9000.00
93	Market Rate Supply of 3 mtr long 50 mm dia G.I pipe with	1.00	Nos	15000.00	15000.00	15000.00

	flat buried in ground with back filling compound in an earth pit mixed with sand in alternate layers of 150mm each up to a height of 2550mm from bottom. The pipe shall have provision for connecting earth flats / wires. Including accessories and Providing masonry Enclosure with cover plate					
94	Market Rate Supply of earth plate of size 600 x 600 x 3mm copper plate earth electrode at a depth 3000 mm in an earth pit of 450 x 450 x 350mm filled with salt and charcoal mixed with sand in alternate layers of 150mm each upto a height of 3000mm from bottom. Two copper flats of Size 25x3mm shall be braced to this copper plate throughout the overlapping length with the copper plate and brought to the surface of the earth pit. This plate shall have provision for connecting wires or flats as the case may be. A suitable size of 50mm dia GI pipe shall be provided upto bottom of the earth pit. This GI pipe shall have provision for watering through a funnel.	1.00	Nos	17000.00	17000.00	17000.00
95	CPWD DSR (E&M 2022) 5.14 Providing and Fixing 25mm X 5mm Copper strip on Surface or in recess for Connections etc. as required	10.00	Meter	1336.30	13363.00	13363.00
96	Market Rate Supply and Laying of 4 Sq.mm 3 Core PVC Sheathed ,XLPE Insulated Multi Core Bright Annealed Bare Copper Conductor Heavy duty Armoured Industrial Cable For Voltage up to 1100 Volts as per the IS:694:1990 with supply and Installation of Suitable Cable gland and suitable Copper Lug and End termination etc, that cable to be lay through PVC conduit 32 mm and supply of PVC pipe ,PVC Bend,PVC Clamp and installation of Clamp and accsories included etc.	70.00	Meter	750.00	52500.00	52500.00
97	Market Rate Supply Installation and Commissioning of 5 HP Wall Mounted DOL for 5HP ,3 phase 415Volt,50Hz Motor Starter with Analog Voltmeter,Analog Ammeter,Insulated Material push buttons,Indication Lamps with Suitable ORL relay and suitable Contactors including the Wall mounting arrangements and Earthing Connections and End Termination work included from Existing Panel Switch FN 32A to Starter and Starter to Motor with available cables in Motor with Supply of Suitable Cable Lugs and cable Gland also included and etc as required (Motor To Starter Cable Supply Not in the Scope)	2.00	Nos	9000.00	18000.00	18000.00
98	Market Rate Supply and Laying of 4 Sq.mm 3 Core PVC Sheathed ,XLPE Insulated Multi Core Bright Annealed Bare Copper Conductor Heavy duty Armoured Industrial Cable For Voltage up to 1100 Volts as per the IS:694:1990 with supply and Installation of Suitable Cable gland and suitable Copper Lug and End termination etc, that cable to be lay through PVC conduit 32 mm and supply of PVC pipe ,PVC Bend,PVC Clamp and installation of Clamp and accsories included etc.	60.00	Meter	750.00	45000.00	45000.00
99	CPWD DSR (E&M 2022) 7.1 Laying One number PVC insulated and PVc Sheathed /XLPE power cable of 1.1 KV grade of following size direct in ground including excavation,sand cushioning,Protective covering and refilling the trench etc as required					
99.0 1	CPWD DSR (E&M 2022) 7.1.1 Upto 35 Sqmm	60.00	Meter	445.05	26703.00	26703.00
100	CPWD DSR (E&M 2022) 2.5 Suppling and Fixing of					

	following Ways surface/recess Mounting Vertical Type 415V TPN MCB Distribution board of sheet steel, Dust Protected,Duly Powder painte,inclusive of 200A tinned Copper busbar,Common neutral link,Earth bar,din bar for mounting MCBs(But without MCBs and incomer) as required.(Note Vertical type MCB TPDB is normally used where 3 Phase Out lets are required)					
100.01	CPWD DSR (E&M 2022) 2.5.2 8 Way (4+24),Double Door	1.00	Nos	11689.75	11689.75	11689.75
101	CPWD DSR (E&M 2022) 2.14 Supply and Fixing following Rating ,double pole,(Single Phase and Neutral)240V residual current circuit breaker (RCCB) having a sensitive current 30mA in the Existing MCB DB complete with connections,testing and Comissioning etc as required					
101.01	CPWD DSR (E&M 2022) 2.14.1 25A	3.00	Each	2332.20	6996.60	6996.60
102	CPWD DSR(E&M 2022) 2.10 Supply and Fixing 32A rating 240/415V,10 kA, "C' curve,miniature Circuit Breaker suitable for inductive load of following poles in the existing MCB DB complete with connections,testing and comisionning etc. as required					
102.01	CPWD DSR (E&M 2022) 2.10.4 Tripple Pole and Neutral	2.00	Nos	1412.20	2824.40	2824.40
103	CPWD DSR (E&M 2022) 2.10 Supply and Fixing 6A rating 240/415V,10 kA, "C' curve,miniature Circuit Breaker suitable for inductive load of following poles in the existing MCB DB complete with connections,testing and comisionning etc. as required					
103.01	CPWD DSR(E&M 2022) 2.10 1 Single Pole	15.00	Nos	294.40	4416.00	4416.00
104	CPWD DSR (E&M 2022) 1.7 Wiring for Circuit/Submain wiring along with earth wire with the following sizes of FRLS PVC insulated Copper conductor,Single core cable in Surface/recessed steel conduit as required					
104.01	CPWD DSR (E&M 2022) 1.7.3 2X4 Sq.mm + 1X 4 sq.mm earth wire	20.00	Meter	492.20	9844.00	9844.00
105	CPWD DSR (E&M 2022) 1.27 Supplying and fixing following size/modules,GI box alongwith modular base & Cover plate for modular switches in recess etc. as required					
105.01	CPWD DSR (E&M 2022) 1.27.4 6 Module (200mm X75mm)	1.00	Each	462.30	462.30	462.30
106	CPWD DSR (E&M 2022)1.24 Supplying and Fixing following Modular Switch/Socket on the existing modular plate & Switch Box including connections but excluding modular plate etc. as required					
106.01	CPWD DSR (E&M 2022)1.24.3 15/16A Switch	1.00	Each	179.40	179.40	179.40
106.02	CPWD DSR (E&M 2022)1.24.5 6 pin 15/16 A Socket outlet	1.00	Each	226.55	226.55	226.55
107	CPWD DSR (E&M 2022) 1.7 Wiring for Circuit/Submain wiring along with earth wire with the following sizes of FRLS PVC insulated Copper conductor,Single core cable in Surface/recessed steel conduit as required					
107.01	CPWD DSR (E&M 2022) 1.7.3 2X4 Sq.mm + 1X 4 sq.mm earth wire	100.00	Meter	492.20	49220.00	49220.00
108	CPWD DSR (E&M 2022) 1.27 Supplying and fixing following size/modules,GI box alongwith modular base &					

	Cover plate for modular switches in recess etc. as required					
108.01	CPWD DSR (E&M 2022) 1.27.4 6 Module (200mm X75mm)	2.00	Each	462.30	924.60	924.60
109	CPWD DSR (E&M 2022) 1.24 CPWD Supplying and Fixing following Modular Switch/Socket on the existing modular plate & Switch Box including connections but excluding modular plate etc. as required					
109.01	CPWD DSR (E&M 2022) 1.24.5 6 pin 15/16 A Socket outlet	2.00	Each	226.55	453.10	453.10
109.02	Market Rate 6 A Modular MCB switch	15.00	Each	300.00	4500.00	4500.00
110	CPWD DSR (E&M 2022) 1.7 Wiring for Circuit/Submain wiring along with earth wire with the following sizes of FRLS PVC insulated Copper conductor,Single core cable in Surface/recessed steel conduit as required					
110.01	CPWD DSR (E&M 2022) 1.7.2 2X2.5 Sq.mm + 1X 2.5 sq.mm earth wire	340.00	Meter	424.35	144279.00	144279.00
111	CPWD DSR (E&M 2022) 1.27 Supplying and fixing following size/modules,GI box alongwith modular base & Cover plate for modular switches in recess etc. as required					
111.01	CPWD DSR (E&M 2022) 1.27.4 6 Module (200mm X75mm)	4.00	Each	462.30	1849.20	1849.20
112	CPWD DSR (E&M 2022) 1.10 Wiring for Light Point/Fan Point/Exhaust fan Point/call bell point with 1.5 Sqmm FRLS PVC Insulated copper conductor single core cable in surface/recessed medium class PVC conduit, with modular switch ,Modular plate,Suitable GI box and Earthing the point with 1.5 Sq.mm FRLS PVC insulated copper conductor single core cable etc. as required					
112.01	CPWD DSR (E&M 2022) 1.10.3 Group C	24.00	Point	1687.05	40489.20	40489.20
113	Market Rate Supply and Installation of the Street light 36W IP65 Cool White with Steel Bend Pipe with Suitable Clamp and any other arrangements required for Installation of Street Lights in Existing Truss or wall or RCC Pillar	24.00	Nos	6000.00	144000.00	144000.00
114	Market Rate Supply and Installation of the Street light 36W IP65 cool white with Steel Bend Pipe	1.00	Nos	5000.00	5000.00	5000.00
115	CPWD DSR (E&M 2022) 2.5 Suppling and Fixing of following Ways surface/recess Mounting Vertical Type 415V TPN MCB Distribution board of sheet steel, Dust Protected,Duly Powder painte,inclusive of 200A tinned Copper busbar,Common neutral link,Earth bar,din bar for mounting MCBs(But without MCBs and incomer) as required.(Note Vertical type MCB TPDB is normally used where 3 Phase Out lets are required)					
115.01	CPWD DSR (E&M 2022) 2.5.2 8 Way (4+24),Double Door	1.00	Nos	11689.75	11689.75	11689.75
116	Market Rate Supply and Fixing 63A Pole rating 240/415V,10 kA, "C" curve,miniature Circuit Breaker suitable for inductive load of following poles in the existing MCB DB complete with connections,testing and comissioning etc. as required (Mark ISI) Make: Legrand/Schneider/L&T/Seimens	1.00	Nos	2300.00	2300.00	2300.00
117	CPWD DSR (E&M 2022) 2.10 Supply and Fixing 20A rating 240/415V,10 kA, "C" curve,miniature Circuit Breaker suitable for inductive load of following poles in the existing MCB DB complete with connections,testing and comissioning etc. as required					

117. 01	CPWD DSR (E&M 2022) 2.10.3 Double Pole Pole	4.00	Nos	754.40	3017.60	3017.60
118	CPWD DSR (E&M 2022) 2.10 Supply and Fixing 16A rating 240/415V,10 kA, "C' curve,miniature Circuit Breaker suitable for inductive load of following poles in the existing MCB DB complete with connections,testing and comissioning etc. as required					
118. 01	CPWD DSR (E&M 2022) 2.10.1 Single Pole	8.00	Nos	294.40	2355.20	2355.20
119	Market Rate Supply and Laying of 16 Sq.mm 4 Core PVC Sheathed ,XLPE Insulated Multi Core Bright Annealed Bare Copper Conductor Heavy duty Armoured Industrial Cable For Voltage up to 1100 Volts as per the IS:694:1990 with supply and Installation of Suitable Cable gland and suitable Copper Lug and End termination etc that cable to be lay through PVC conduit 32 mm and supply of PVC pipe ,PVC Bend,PVC Clamp and installation of Clamp and accsories included etc.	70.00	Meter	2500.00	175000.00	175000.00
119. 01	CPWD DSR (E&M 2022) 7.1.1 Laying One number PVC insulated and PVc Sheathed /XLPE power cable of 1.1 KV grade of following size direct in ground including excavation,sand cushioning,Protective covering and refilling the trench etc as required					
120	CPWD DSR (E&M 2022) 7.1.1 Upto 35 Sqmm	70.00	Meter	445.05	31153.50	31153.50
120. 01	CPWD DSR (E&M 2022) 7.1. Wiring for Circuit/Submain wiring along with earth wire with the following sizes of FRLS PVC insulated Copper conductor,Single core cable in Surface/recessed steel conduit as required					
121	CPWD DSR (E&M 2022) 7.1.3 2X4 Sq.mm + 1X 4 sq.mm earth wire	120.00	Meter	492.20	59064.00	59064.00
121. 01	CPWD DSR (E&M 2022) 1.27 Supplying and fixing following size/modules,GI box alongwith modular base & Cover plate for modular switches in recess etc. as required					
122	CPWD DSR (E&M 2022) 1.27.4 6 Module (200mm X75mm)	6.00	Each	462.30	2773.80	2773.80
122. 01	CPWD DSR (E&M 2022)1.24 Supplying and Fixing following Modular Switch/Socket on the existing modular plate & Switch Box including connections but excluding modular plate etc. as required					
123	CPWD DSR (E&M 2022)1.24.3 15/16A Switch	12.00	Each	179.40	2152.80	2152.80
124	CPWD DSR (E&M 2022)1.24.5 6 pin 15/16 A Socket outlet	12.00	Each	226.55	2718.60	2718.60
124. 01	CPWD DSR (E&M 2022) 7.1. Wiring for Circuit/Submain wiring along with earth wire with the following sizes of FRLS PVC insulated Copper conductor,Single core cable in Surface/recessed steel conduit as required					
125	CPWD DSR (E&M 2022) 7.1.2 2X2.5 Sq.mm + 1X 2.5 sq.mm earth wire	150.00	Meter	424.35	63652.50	63652.50
125. 01	CPWD DSR (E&M 2022)1.10 Wiring for Light Point/Fan Point/Exhaust fan Point/call bell point with 1.5 Sqmm FRLS PVC Insulated copper conductor single core cable in surface/recessed medium class PVC conduit, with modular switch ,Modular plate,Suitable GI box and Earthing the point with 1.5 Sq.mm FRLS PVC insulated copper conductor single core cable etc. as required					
126	CPWD DSR(E&M 2022)1.10.3 Group C	35.00	Point	1687.05	59046.75	59046.75
126. 01	CPWD DSR(E&M 2022) 1.27 Supplying and fixing following size/modules,GI box alongwith modular base &					

	Cover plate for modular switches in recess etc. as required					
127	CPWD DSR (E&M 2022) 1.27.4 6 Module (200mm X75mm)	6.00	Each	462.30	2773.80	2773.80
127.01	CPWD DSR (E&M 2022) 1.24 Supplying and Fixing following Modular Switch/Socket on the existing modular plate & Switch Box including connections but excluding modular plate etc. as required					
128	CPWD DSR (E&M 2022) 1.24.1 5/6 A switch	36.00	Each	118.45	4264.20	4264.20
128.01	CPWD DSR (E&M 2022) 7.1 Wiring for Circuit/Submain wiring along with earth wire with the following sizes of FRLS PVC insulated Copper conductor,Single core cable in Surface/recessed steel conduit as required					
129	CPWD DSR (E&M 2022) 7.1.2 2X2.5 Sq.mm + 1X 2.5 sq.mm earth wire	50.00	Meter	424.35	21217.50	21217.50
129.01	CPWD DSR (E&M 2022) 1.27 Supplying and fixing following size/modules,GI box alongwith modular base & Cover plate for modular switches in recess etc. as required					
130	CPWD DSR(E&M 2022) 1.27.4 6 Module (200mm X75mm)	2.00	Each	462.30	924.60	924.60
130.01	CPWD DSR (E&M 2022) 1.24 Supplying and Fixing following Modular Switch/Socket on the existing modular plate & Switch Box including connections but excluding modular plate etc. as required					
131	CPWD DSR (E&M 2022) 1.24.1 5/6 A switch	6.00	Each	118.45	710.70	710.70
131.01	CPWD DSR (E&M 2022) 7.1. Wiring for Circuit/Submain wiring along with earth wire with the following sizes of FRLS PVC insulated Copper conductor,Single core cable in Surface/recessed steel conduit as required					
132	CPWD DSR (E&M 2022) 7.1.3 2X4 Sq.mm + 1X 4 sq.mm earth wire	30.00	Meter	492.20	14766.00	14766.00
132.01	CPWD DSR (E&M 2022) 1.24 Supplying and Fixing following Modular Switch/Socket on the existing modular plate & Switch Box including connections but excluding modular plate etc. as required					
133	CPWD DSR (E&M 2022) 1.24.3 15/16A Switch	2.00	Each	179.40	358.80	358.80
134	CPWD DSR (E&M 2022) 1.24.5 6 pin 15/16 A Socket outlet	2.00	Each	226.55	453.10	453.10
134.01	CPWD DSR (E&M 2022) 1.27 Supplying and fixing following size/modules,GI box alongwith modular base & Cover plate for modular switches in recess etc. as required					
135	CPWD DSR (E&M 2022) 1.27.4 6 Module (200mm X75mm)	1.00	Each	462.30	462.30	462.30
136	CPWD DSR (E&M 2022) 1.10 Wiring for Light Point/Fan Point/Exhaust fan Point/call bell point with 1.5 Sqmm FRLS PVC Insulated copper conductor single core cable in surface/recessed medium class PVC conduit, with modular switch ,Modular plate,Suitable GI box and Earthing the point with 1.5 Sq.mm FRLS PVC insulated copper conductor single core cable etc. as required					
136.01	CPWD DSR(E&M 2022) 1.10.3 Group C	6.00	Point	1687.05	10122.30	10122.30
137	Market Rate Supply and Installation and Comissioning of LED Tube light 34/36 W Colour Temperature 6500K Cool day light,Luminous flux 2100 lm 140 -270 Volt AC 50 Hz IP 65 Batten Material Polycarbonate 4 feet Type and Clamp fixing acceesories included Indoor Industrial Application	9.00	Nos	3000.00	27000.00	27000.00
138	Market Rate Supply and Fixing of A.C Exhaust Fan 150mm Sweep (Light Duty) complete with necessary wall opening and making good of the wall or window and Installation Fittings and Accessories and etc as required	3.00	Nos	3000.00	9000.00	9000.00
139	Market Rate Supply and Laying of 4 Sq.mm 3 Core PVC	70.00	Meter	750.00	52500.00	52500.00

	Sheathed ,XLPE Insulated Multi Core Bright Annealed Bare Copper Conductor Heavy duty Armoured Industrial Cable For Voltage up to 1100 Volts as per the IS:694:1990 with supply and Installation of Suitable Cable gland and suitable Copper Lug and End termination etc, that cable to be lay through PVC conduit 32 mm and supply of PVC pipe ,PVC Bend,PVC Clamp and installation of Clamp and accsories included etc.					
139. 01	CPWD DSR(E&M 2022) 7.1. Laying One number PVC insulated and PVc Sheathed /XLPE power cable of 1.1 KV grade of following size direct in ground including excavation,sand cushioning,Protective covering and refilling the trench etc as required					
140	CPWD DSR (E&M 2022) 7.1.1 Upto 35 Sqmm	70.00	Meter	445.05	31153.50	31153.50
141	CPWD DSR (E&M 2022) 2.5.2 Suppling and Fixing of following Ways surface/recess Mounting Vertical Type 415V TPN MCB Distribution board of sheet steel, Dust Protected,Duly Powder painte,inclusive of 200A tinned Copper busbar,Common neutral link,Earth bar,din bar for mounting MCBs(But without MCBs and incomer) as required.(Note Vertical type MCB TPDB is normally used where 3 Phase Out lets are required)					
141. 01	CPWD DSR (E&M 2022) 2.5.2 8 Way (4+24),Double Door	1.00	Nos	11689.75	11689.75	11689.75
142	CPWD DSR (E&M 2022) 2.14 Supply and Fixing following Rating, double pole,(Single Phase and Neutral)240V residual current circuit breaker (RCCB) having a sensitive current 30mA in the Existing MCB DB complete with connections,testing and Comissioning etc as required					
142. 01	CPWD DSR (E&M 2022) 2.14.1 25A	3.00	Each	2332.20	6996.60	6996.60
143	CPWD DSR (E&M 2022) 2.10 Supply and Fixing 32A rating 240/415V,10 kA, "C' curve,miniature Circuit Breaker suitable for inductive load of following poles in the existing MCB DB complete with connections,testing and comissioning etc. as required					
143. 01	CPWD DSR (E&M 2022) 2.10.4 Tripple Pole and Neutral	2.00	Nos	1412.20	2824.40	2824.40
144	CPWD DSR (E&M 2022) 2.10 Supply and Fixing 6A rating 240/415V,10 kA, "C' curve,miniature Circuit Breaker suitable for inductive load of following poles in the existing MCB DB complete with connections,testing and comissioning etc. as required					
144. 01	CPWD DSR (E&M 2022) 2.10.1 Single Pole	15.00	Nos	294.40	4416.00	4416.00
145	Market Rate Supply of 3 mtr long 50 mm dia G.I pipe with flat buried in ground with back filling compound in an earth pit mixed with sand in alternate layers of 150mm each up to a height of 2550mm from bottom. The pipe shall have provision for connecting earth flats / wires. Including accessories and Providing masonry Enclosure with cover plate	1.00	Nos	15000.00	15000.00	15000.00
146	Market Rate Supply of earth plate of size 600 x 600 x 3mm copper plate earth electrode at a depth 3000 mm in an earth pit of 450 x 450 x 350mm filled with salt and charcoal mixed with sand in alternate layers of 150mm each upto a height of 3000mm from bottom. Two copper flats of Size 25x3mm	1.00	Nos	17000.00	17000.00	17000.00

	shall be braced to this copper plate throughout the overlapping length with the copper plate and brought to the surface of the earth pit. This plate shall have provision for connecting wires or flats as the case may be. A suitable size of 50mm dia GI pipe shall be provided upto bottom of the earth pit. This GI pipe shall have provision for watering through a funnel.					
147	CPWD DSR (E&M 2022) 5.14 Providing and Fixing 25mm X 5mm Copper strip on Surface or in recess for Connections etc. as required	25.00	Meter	1336.30	33407.50	33407.50
148	CPWD DSR (E&M 2022) 7.1. Wiring for Circuit/Submain wiring along with earth wire with the following sizes of FRLS PVC insulated Copper conductor,Single core cable in Surface/recessed steel conduit as required					
148. 01	CPWD DSR (E&M 2022) 7.1.3 2X4 Sq.mm +1X 4 sq.mm earth wire	120.00	Meter	492.20	59064.00	59064.00
149	CPWD DSR (E&M 2022) 1.27 Supplying and fixing following size/modules,GI box alongwith modular base & Cover plate for modular switches in recess etc. as required					
149. 01	CPWD DSR (E&M 2022) 1.27.4 1 Module (75 mm X75mm)	4.00	Each	342.70	1370.80	1370.80
150	CPWD DSR (E&M 2022) 1.27.1 Supplying and fixing following size/modules,GI box alongwith modular base & Cover plate for modular switches in recess etc. as required					
150. 01	2 Module (75 mm X75mm)	4.00	Each	342.70	1370.80	1370.80
151	CPWD DSR (E&M 2022)1.24 Supplying and Fixing following Modular Switch/Socket on the existing modular plate & Switch Box including connections but excluding modular plate etc. as required					
151. 1	CPWD DSR (E&M 2022)1.24.3 15/16A Switch	4.00	Each	179.40	717.60	717.60
151. 2	CPWD DSR (E&M 2022)1.24.5 Modular MCB 16A	4.00	Each	226.55	906.20	906.20
153	Market Rate Supply ,Installation,Commissioning of Split type Air Conditioner wall Mounted Indoor Unit with 2 TON Capacity Non Inverter 230V ,50HZ with With Remote control,AC out door stand ,Indoor mounting frame,required copper pipe and Drain pipe with PVC Drain Pipe Installation and Indoor Plug Top	4.00	Nos	60000.00	240000.00	240000.00
153. 01	CPWD DSR (E&M 2022) 2.5 Suppling and Fixing of following Ways surface/recess Mounting Vertical Type 415V TPN MCB Distribution board of sheet steel, Dust Protected,Duly Powder painte,inclusive of 200A tinned Copper busbar,Common neutral link,Earth bar,din bar for mounting MCBs(But without MCBs and incomer) as required.(Note Vertical type MCB TPDB is normally used where 3 Phase Out lets are required)					
154	CPWD DSR (E&M 2022) 2.5.2 8 Way (4+24),Double Door	1.00	Nos	11689.75	11689.75	11689.75
155	Market Rate Supply and Fixing 63A Pole rating 240/415V,10 kA, "C' curve,miniature Circuit Breaker suitable for inductive load of following poles in the existing MCB DB complete with connections,testing and comissioning etc. as required	1.00	Nos	2300.00	2300.00	2300.00
155. 01	CPWD DSR (E&M 2022) 2.10 Supply and Fixing 20A rating 240/415V,10 kA, "C' curve,miniature Circuit Breaker suitable for inductive load of following poles in the existing MCB DB complete with connections,testing and comissioning etc. as					

	required					
156	CPWD DSR (E&M 2022) 2.10.3 Double Pole	5.00	Nos	754.40	3772.00	3772.00
156.01	CPWD DSR (E&M 2022) 2.10 Supply and Fixing 16A rating 240/415V,10 kA, "C' curve,miniature Circuit Breaker suitable for inductive load of following poles in the existing MCB DB complete with connections,testing and comissioning etc. as required					
157	CPWD DSR (E&M 2022) 2.10.1 Single Pole	20.00	Nos	294.40	5888.00	5888.00
158	Market Rate Supply and Laying of 4 Sq.mm 4 Core PVC Sheathed ,XLPE Insulated Multi Core Bright Annealed Bare Copper Conductor Heavy duty Armoured Industrial Cable For Voltage up to 1100 Volts as per the IS:694:1990 with supply and Installation of Suitable Cable gland and suitable Copper Lug and End termination etc that cable to be lay through PVC conduit 32 mm and supply of PVC pipe ,PVC Bend,PVC Clamp and installation of Clamp and accsories included etc.	50.00	Meter	750.00	37500.00	37500.00
158.01	CPWD DSR (E&M 2022) 7.1. Laying One number PVC insulated and PVc Sheathed /XLPE power cable of 1.1 KV grade of following size direct in ground including excavation,sand cushioning,Protective covering and refilling the trench etc as required					
159	CPWD DSR (E&M 2022) 7.1. 1 Upto 35 Sqmm	50.00	Meter	445.05	22252.50	22252.50
160	Market Rate Supply and Laying of 4 Sq.mm 3 Core PVC Sheathed ,XLPE Insulated Multi Core Bright Annealed Bare Copper Conductor Heavy duty Armoured Industrial Cable For Voltage up to 1100 Volts as per the IS:694:1990 with supply and Installation of Suitable Cable gland and suitable Copper Lug and End termination etc, that cable to be lay through PVC conduit 32 mm and supply of PVC pipe ,PVC Bend,PVC Clamp and installation of Clamp and accsories included etc.	80.00	Meter	750.00	60000.00	60000.00
160.01	CPWD DSR (E&M 2022) 7.1. Laying One number PVC insulated and PVc Sheathed /XLPE power cable of 1.1 KV grade of following size direct in ground including excavation,sand cushioning,Protective covering and refilling the trench etc as required					
161	CPWD DSR (E&M 2022) 7.1.1 Upto 35 Sqmm	80.00	Meter	445.05	35604.00	35604.00
161.01	CPWD DSR (E&M 2022) 2.5 Suppling and Fixing of following Ways surface/recess Mounting Vertical Type 415V TPN MCB Distribution board of sheet steel, Dust Protected,Duly Powder painte,inclusive of 200A tinned Copper busbar,Common neutral link,Earth bar,din bar for mounting MCBs(But without MCBs and incomer) as required.(Note Vertical type MCB TPDB is normally used where 3 Phase Out lets are required)					
162	CPWD DSR (E&M 2022) 2.5.2.2 8 Way (4+24),Double Door	1.00	Nos	11689.75	11689.75	11689.75
162.01	CPWD DSR (E&M 2022) 2.14 Supply and Fixing following Rating ,double pole,(Single Phase and Neutral)240V residual current circuit breaker (RCCB) having a sensitive current 30mA in the Existing MCB DB complete with connections,testing and Comissioning etc as required					
163	CPWD DSR (E&M 2022) 2.14.1 25A	3.00	Each	2332.20	6996.60	6996.60
164	CPWD DSR(E&M 2022) 2.10 Supply and Fixing 32A rating 240/415V,10 kA, "C' curve,miniature Circuit Breaker suitable for inductive load of following poles in the existing MCB DB complete with connections,testing and comissioning etc. as					

	required					
164. 01	CPWD DSR (E&M 2022) 2.10 .4 Tripple Pole and Neutral	2.00	Nos	1412.20	2824.40	2824.40
165	CPWD DSR (E&M 2022) 2.10 Supply and Fixing 6A rating 240/415V,10 kA, "C' curve,miniature Circuit Breaker suitable for inductive load of following poles in the existing MCB DB complete with connections,testing and comissioning etc. as required					
165. 01	CPWD DSR (E&M 2022) 2.10.1 Single Pole	15.00	Nos	294.40	4416.00	4416.00
166	CPWD DSR (E&M 2022) 7.1. Wiring for Circuit/Submain wiring along with earth wire with the following sizes of FRLS PVC insulated Copper conductor,Single core cable in Surface/recessed steel conduit as required					
166. 01	CPWD DSR (E&M 2022) 7.1.2 2X2.5 Sq.mm + 1X 2.5 sq.mm earth wire	150.00	Meter	224.35	33652.50	33652.50
167	CPWD DSR (E&M 2022) 1.27 Supplying and fixing following size/modules,GI box alongwith modular base & Cover plate for modular switches in recess etc. as required					
167. 01	CPWD DSR (E&M 2022) 1.27.2 3 Module (75 mm X75mm)	4.00	Each	427.80	1711.20	1711.20
168	CPWD DSR (E&M 2022)1.27 Supplying and fixing following size/modules,GI box alongwith modular base & Cover plate for modular switches in recess etc. as required					
168. 01	CPWD DSR (E&M 2022) 1.27.5 8 Module (200mm X75mm)	8.00	Each	522.10	4176.80	4176.80
169	CPWD DSR(E&M 2022)1.7 Wiring for Circuit/Submain wiring along with earth wire with the following sizes of FRLS PVC insulated Copper conductor,Single core cable in Surface/recessed steel conduit as required					
169. 01	CPWD DSR (E&M 2022)1.7.3 2X4 Sq.mm + 1X 4 sq.mm earth wire	150.00	Meter	292.20	43830.00	43830.00
170	CPWD DSR(E&M 2022) 1.27 Supplying and fixing following size/modules,GI box alongwith modular base & Cover plate for modular switches in recess etc. as required					
170. 01	CPWD DSR (E&M 2022) 1.27.4 6 Module (200mm X75mm)	10.00	Each	462.30	4623.00	4623.00
171	CPWD DSR (E&M 2022)1.24 Supplying and Fixing following Modular Switch/Socket on the existing modular plate & Switch Box including connections but excluding modular plate etc. as required					
171. 01	CPWD DSR (E&M 2022)1.24.3 15/16A Switch	16.00	Each	179.40	2870.40	2870.40
172	CPWD DSR(E&M 2022)1.24.5 6 pin 15/16 A Socket outlet	16.00	Each	226.55	3624.80	3624.80
173	CPWD DSR(E&M 2022)1.26 Supply and Fixing modular blanking plate on the existing modular Plate & Switch Box excluding Modular Plate as required	40.00	Each	46.00	1840.00	1840.00
173. 01	CPWD DSR (E&M 2022)1.24 Supplying and Fixing following Modular Switch/Socket on the existing modular plate & Switch Box including connections but excluding modular plate etc. as required					
174	CPWD DSR (E&M 2022)1.24.1 5/6 A switch	38.00	Each	118.45	4501.10	4501.10
174. 01	CPWD DSR (E&M 2022)1.10 Wiring for Light Point/Fan Point/Exhaust fan Point/call bell point with 1.5 Sqmm FRLS PVC Insulated copper conductor single core cable in surface/recessed medium class PVC conduit, with modular switch ,Modular plate,Suitable GI box and Earthing the point					

	with 1.5 Sq.mm FRLS PVC insulated copper conductor single core cable etc. as required					
175	CPWD DSR (E&M 2022)1.10.3 Group C	28.00	Point	1687.05	47237.40	47237.40
176	Market Rate Supply and Installation and Comissioning of LED 15W Recessed Round Light fixing acceesories included (Make Philips,Crompton,Syska) Indoor Industrial Application	28.00	Nos	1500.00	42000.00	42000.00
177	Market Rate Supply and Installation and Comissioning of LED Tube light 34/36 W Colour Temperature 6500K Cool day light,Luminous flux 2100 lm 140 -270 Volt AC 50 Hz IP 65 Batten Material Polycarbonate 4 feet Type and Clamp fixing acceesories included (Make Philips,Crompton,Syska) Indoor Industrial Application	3.00	Nos	3000.00	9000.00	9000.00
177. 01	CPWD DSR(E&M 2022) 7.1. Wiring for Circuit/Submain wiring along with earth wire with the following sizes of FRLS PVC insulated Copper conductor,Single core cable in Surface/recessed steel conduit as required					
178	CPWD DSR(E&M 2022) 7.1.3 2X4 Sq.mm + 1X 4 sq.mm earth wire	150.00	Meter	492.20	73830.00	73830.00
179	CPWD DSR (E&M 2022) 7.1. Wiring for Circuit/Submain wiring along with earth wire with the following sizes of FRLS PVC insulated Copper conductor,Single core cable in Surface/recessed steel conduit as required					
179. 01	CPWD DSR (E&M 2022) 7.1.2 2X2.5 Sq.mm + 1X 2.5 sq.mm earth wire	150.00	Meter	424.35	63652.50	63652.50
180	CPWD DSR(E&M 2022) 1.27 Supplying and fixing following size/modules,GI box alongwith modular base & Cover plate for modular switches in recess etc. as required					
180. 01	CPWD DSR(E&M 2022) 1.27.2 3 Module (100mm X75mm)	4.00	Each	376.05	1504.20	1504.20
181	CPWD DSR (E&M 2022)1.24 Supplying and Fixing following Modular Switch/Socket on the existing modular plate & Switch Box including connections but excluding modular plate etc. as required					
181. 01	CPWD DSR (E&M 2022)1.24.1 5/6 A switch	8.00	Each	118.45	947.60	947.60
182	CPWD DSR (E&M 2022)1.24 Supplying and Fixing following Modular Switch/Socket on the existing modular plate & Switch Box including connections but excluding modular plate etc. as required					
182. 01	CPWD DSR (E&M 2022)1.24.3 15/16A Switch	19.00	Each	179.40	3408.60	3408.60
183	CPWD DSR (E&M 2022)1.26 Supply and Fixing modular blanking plate on the existing modular Plate & Switch Box excluding Modular Plate as required	10.00	Each	46.00	460.00	460.00
184	CPWD DSR (E&M 2022)1.10 Wiring for Light Point/Fan Point/Exhaust fan Point/call bell point with 1.5 Sqmm FRLS PVC Insulated copper conductor single core cable in surface/recessed medium class PVC conduit, with modular switch ,Modular plate,Suitable GI box and Earthing the point with 1.5 Sq.mm FRLS PVC insulated copper conductor single core cable etc. as required					
184. 01	CPWD DSR (E&M 2022)1.10.3 Group C	9.00	Point	1687.05	15183.45	15183.45
185	Market Rate Supply and Fixing of A.C Exhaust Fan 150mm Sweep (Light Duty) complete with necessary wall opening and making good of the wall or window and Installation	4.00	Nos	2500.00	10000.00	10000.00

	Fittings and Accessories and etc as required					
186	Market Rate Supply of 3 mtr long 50 mm dia G.I pipe with flat buried in ground with back filling compound in an earth pit mixed with sand in alternate layers of 150mm each up to a height of 2550mm from bottom. The pipe shall have provision for connecting earth flats / wires. Including accessories and Providing masonry Enclosure with cover plate	1.00	Nos	15000.00	15000.00	15000.00
187	Market Rate Supply of earth plate of size 600 x 600 x 3mm copper plate earth electrode at a depth 3000 mm in an earth pit of 450 x 450 x 350mm filled with salt and charcoal mixed with sand in alternate layers of 150mm each upto a height of 3000mm from bottom. Two copper flats of Size 25x3mm shall be braced to this copper plate throughout the overlapping length with the copper plate and brought to the surface of the earth pit. This plate shall have provision for connecting wires or flats as the case may be. A suitable size of 50mm dia GI pipe shall be provided upto bottom of the earth pit. This GI pipe shall have provision for watering through a funnel.	1.00	Nos	17000.00	17000.00	17000.00
188	CPWD DSR (E&M 2022) 5.14 Providing and Fixing 25mm X 5mm Copper strip on Surface or in recess for Connections etc. as required	25.00	Meter	1336.30	33407.50	33407.50
188. 01	CPWD DSR (E&M 2022) 7.1. Wiring for Circuit/Submain wiring along with earth wire with the following sizes of FRLS PVC insulated Copper conductor,Single core cable in Surface/recessed steel conduit as required					
189	CPWD DSR (E&M 2022) 7.1.3 2X4 Sq.mm + 1X 4 sq.mm earth wire	150.00	Meter	492.20	73830.00	73830.00
189. 01	CPWD DSR (E&M 2022) 1.27 Supplying and fixing following size/modules,GI box alongwith modular base & Cover plate for modular switches in recess etc. as required					
190	CPWD DSR (E&M 2022) 1.27.4 1 Module (75mm X75mm)	5.00	Each	342.70	1713.50	1713.50
190. 01	CPWD DSR (E&M 2022) 1.27 Supplying and fixing following size/modules,GI box alongwith modular base & Cover plate for modular switches in recess etc. as required					
191	CPWD DSR (E&M 2022) 1.27.1 2 Module (75mm X75mm)	5.00	Each	342.70	1713.50	1713.50
191. 01	CPWD DSR (E&M 2022)1.24 Supplying and Fixing following Modular Switch/Socket on the existing modular plate & Switch Box including connections but excluding modular plate etc. as required					
192	CPWD DSR(E&M 2022)1.24.3 16A Modular MCB	5.00	Each	179.40	897.00	897.00
193	CPWD DSR (E&M 2022)1.24.5 6 pin 15/16 A Socket outlet	5.00	Each	226.55	1132.75	1132.75
194	Market Rate Supply ,Installation,Commissioning of Split type Air Conditioner wall Mounted Indoor Unit with 1.8/2 TON Capacity Non Inverter 230V ,50HZ with With Remote control,AC out door stand ,Indoor mounting frame,required copper pipe and Drain pipe with PVC Drain Pipe Installation and Indoor Plug Top	3.00	Nos	60000.00	180000.00	180000.00
195	Market Rate Supply ,Installation,Commissioning of Split type Air Conditioner wall Mounted Indoor Unit with 1.8/2 TON Capacity Non Inverter 230V ,50HZ with With Remote control,AC out door stand ,Indoor mounting frame,required copper pipe and Drain pipe with PVC Drain Pipe Installation and Indoor Plug Top	2.00	Nos	60000.00	120000.00	120000.00
196	CPWD DSR (E&M 2022) 19.1 Supply and Installation, Commissioning of 1200mm Sweep BEE 5 Star Celng	6.00	Each	3139.50	18837.00	18837.00

	Fanwith brush less Direct Current (BLDC) Motor Class of Insulation B Nos of Blades ,30cm Long Down Rod 2 Nos Canopies Shackle kit,Safety Rope,Cpeer winding power factor not less than 0.9 service value (CM/M/W) minimum 6.00 Air Delivery minimum 210 Cum/Min,350 RPM (Tolerance as per IS: 374-2019)THD less than 10% remeote or Electronic Regulator for speed control all remaining acessories including Safety Pin,Nut Bolts,Washers,Temperature rise=75 deg C (Max) Insulation resistance more than 2 Mega ohm suitable for 230V,50HZ single phase AC Supply eartning etc,Complete as required					
197	CPWD DSR (E&M 2022) 7.1. Wiring for Circuit/Submain wiring along with earth wire with the following sizes of FRLS PVC insulated Copper conductor,Single core cable in Surface/recessed steel conduit as required					
197. 1	CPWD DSR (E&M 2022) 7.1.2 2X2.5 Sq.mm + 1X 2.5 sq.mm earth wire	50.00	Meter	424.35	21217.50	21217.50
198	CPWD DSR (E&M 2022)1.10 Wiring for Light Point/Fan Point/Exhaust fan Point/call bell point with 1.5 Sqmm FRLS PVC Insulated copper conductor single core cable in surface/recessed medium class PVC conduit, with modular switch ,Modular plate,Suitable GI box and Earthing the point with 1.5 Sq.mm FRLS PVC insulated copper conductor single core cable etc. as required					
198. 01	CPWD DSR (E&M 2022)1.10.3 Group C	6.00	Point	1687.05	10122.30	10122.30
199	CPWD DSR (E&M 2022) 19.1 Supply and Installation, Commissioning of 1200mm Sweep BEE 5 Star Celng Fanwith brush less Direct Current (BLDC) Motor Class of Insulation B Nos of Blades ,30cm Long Down Rod 2 Nos Canopies Shackle kit,Safety Rope,Cpeer winding power factor not less than 0.9 service value (CM/M/W) minimum 6.00 Air Delivery minimum 210 Cum/Min,350 RPM (Tolerance as per IS: 374-2019)THD less than 10% remeote or Electronic Regulator for speed control all remaining acessories including Safety Pin,Nut Bolts,Washers,Temperature rise=75 deg C (Max) Insulation resistance more than 2 Mega ohm suitable for 230V,50HZ single phase AC Supply eartning etc,Complete as required	12.00	Each	3139.50	37674.00	37674.00
199. 01	CPWD DSR (E&M 2022) 7.1. Wiring for Circuit/Submain wiring along with earth wire with the following sizes of FRLS PVC insulated Copper conductor,Single core cable in Surface/recessed steel conduit as required					
200	CPWD DSR (E&M 2022) 7.1.2 2X2.5 Sq.mm + 1X 2.5 sq.mm earth wire	80.00	Meter	424.35	33948.00	33948.00
200. 01	CPWD DSR (E&M 2022)1.10 Wiring for Light Point/Fan Point/Exhaust fan Point/call bell point with 1.5 Sqmm FRLS PVC Insulated copper conductor single core cable in surface/recessed medium class PVC conduit, with modular switch ,Modular plate,Suitable GI box and Earthing the point with 1.5 Sq.mm FRLS PVC insulated copper conductor single core cable etc. as required					
201	CPWD DSR (E&M 2022)1.10.3 Group C	8.00	Point	1687.05	13496.40	13496.40
201. 01	CPWD DSR (E&M 2022) 1.27 Supplying and fixing following size/modules,GI box alongwith modular base & Cover plate for modular switches in recess etc. as required					
202	CPWD DSR (E&M 2022) 1.27.4 6 Module (200mm	3.00	Each	462.30	1386.90	1386.90

	X75mm)					
203	Market Rate Supply of UPS Input 230V,AC,50/60 Hz,4.5A,1 pase,Output voltage :230V,Ac,50/60 Hz,2.9A,1Phase,DC voltage:12V,39.4A,Capacity:650VA/630W	4.00	Each	2500.00	10000.00	10000.00
204	Market Rate Supply and Laying of 6 Sq.mm 4 Core PVC Sheathed ,XLPE Insulated Multi Core Bright Annealed Bare Copper Conductor Heavy duty Armoured Industrial Cable For Voltage up to 1100 Volts as per the IS:694:1990 with supply and Installation of Suitable Cable gland and suitable Copper Lug and End termination etc that cable to be lay through PVC conduit 32 mm and supply of PVC pipe ,PVC Bend,PVC Clamp and installation of Clamp and accsories included etc.	90.00	Meter	850.00	76500.00	76500.00
204. 01	CPWD DSR (E&M 2022) 7.1. Wiring for Circuit/Submain wiring along with earth wire with the following sizes of FRLS PVC insulated Copper conductor,Single core cable in Surface/recessed steel conduit as required					
205	CPWD DSR (E&M 2022) 7.1.3 2X4 Sq.mm + 1X 4 sq.mm earth wire	90.00	Meter	492.20	44298.00	44298.00
206	Market Rate Supply and Installation of BEE 5 Star Rating for superior energy efficiency. with CFC-free PUF insulation for maximizing heat retention,Pebble Shine DG Storage Water Heaters come with an user-friendly temperature display and adjustable temperature control knob,Built-in safety shock module offers comprehensive protection against electric shock,Rust-proof ABS Body Model for enhanced durability,Titanium enriched vitreous enamel coating used in the inner tank for higher corrosion resistance,Superior Incoloy 800 heating element for sustained heating performance & sacrificial magnesium anode rod for extended lifespan,Suitable for high-rise buildings & hard water usage,Multi layered safety features for complete peace of mind,Warranty of 2 Year on Product; 4 Year on Heating Element; 7 Year on Inner Tank	4.00	Nos	2000.00	8000.00	8000.00
207	EQUIPMENT AND MACHINERY					
207. 1	Centrifugal Pumps for Sea water Intake					
207. 2	Market Rate Supply, Installation and Commissioning of Centrifugal Pumps for Sea Water Operation Pump,Type: Horizontal End Suction Single Stage Centrifugal Pump, Flow/Delivery (Q):80 m3/hr, Head: 20 Meter, Power: 10HP ,Suction Pressure : Flooded,NPSH(m) Required: 0.9Meter Casing: Volute, Seal: Mechanical Seal , Working Fluid: Sea water, Specific Gravity of Working Fluid (Sea Water) :1.025,RPM:1400-1500,Pump Casing MOC: Duplex Steel, Casing Cover: Duplex Steel Pump Impeller MOC: Duplex Steel ,Impeller Type : Closed Impeller Shaft MOC: SS329L,Sleeve MOC:SS329L,Mechanical seal fluid contact Parts MOC: SS329L,Standatds:EN 22858,ISO 2858,DIN 24256,Oil Lubrication, Breather, Filling Plug on Top, Oil Sight Glass, Constant Oil Leveler, Accessories comprising with MS with Hot Dip Galvanizing, Base Frame MOC: Hot Dip Galvanized, Coupling, Coupling Guard, GI Foundation Bolts, Motor Specification: Motor Power :10 HP,RPM:1400-1500,Volt:415V,Frequency:50Hz,Phase-3 , Motor Coil: Copper,IP-65,IE3, Motor Body MOC : Iron Alloy /CI, Ambient temp: 50 Deg cel	2.00	Each	540000.00	1080000.00	1080000.00

208	<p>Market Rate Supply, Installation and Commissioning of Centrifugal Pumps for Sea Water Operation, Type: Horizontal End Suction Single Stage Centrifugal Pump, Flow/Delivery (Q):80 m3/hr, Head: 20 Meter, Suction: Negative Suction, Suction Lift: 2.5 (From Tank Bottom to Impeller Eye: 2.5 Meter) Meter Casing: Volute, Seal: Mechanical Seal, Working Fluid: Sea water, Specific Gravity of Working Fluid /Sea Water:1.025, Power : 10 HP, RPM:1400-1500, Pump Casing MOC: Duplex Steel, Casing Cover: Duplex Steel Pump Impeller MOC: Duplex Steel, Impeller Type : Closed Impeller Shaft MOC: SS329L, Sleeve MOC: SS329L, Mechanical seal fluid contact Parts MOC: SS329L, Standard: EN 22858, ISO 2858, DIN 24256, Oil Lubrication, Breather, Filling Plug on Top, Oil Sight Glass, Constant Oil Leveler, Accessories comprising with MS with Hot Dip Galvanizing, Base Frame MOC: Hot Dip Galvanized, Coupling, Coupling Guard, GI Foundation Bolts, Motor Specification: Motor Power :10 HP, RPM: 1450, Volt:415V, Frequency:50Hz, Phase-3, Motor Coil: Copper, IP-65, IE3, Motor Body MOC : Iron Alloy /CI, Ambient temp: 50 Deg cel, Design, Supply and Installation of Priming Pot with FRP MOC with Suction Lift :2.5 Meter with Proper Suitable Flange as per the Pump Suction Size</p>	2.00	Each	624000.00	1248000.00	1248000.00
209	<p>Market Rate Supply, Installation and Commissioning of Centrifugal Pumps with supply and Installation of suitable Priming Pot for Sea Water Operation Pump Specification: Type: Horizontal End Suction Single Stage Centrifugal Pump, Flow/Delivery (Q):100-150 m3/hr, Head: 25 Meter, NPSHR: 2.7 Meter, Suction: Negative, Casing: Volute, Seal: Mechanical Seal, Working Fluid: Sea water, Specific Gravity of Working Fluid /Sea Water:1.025, Power : 20HP RPM:1450, Mechanical seal fluid contact Parts MOC: SS329L, Standard: EN 22858, ISO 2858, DIN 24256, Oil Lubrication, Breather, Filling Plug on Top, Oil Sight Glass, Constant Oil Leveler, Accessories comprising with MS with Hot Dip Galvanizing, Base Frame MOC: Hot Dip Galvanized, Coupling, Coupling Guard, GI Foundation Bolts, Motor Specification: Power:20HP, RPM:1450, Volt:415V, Frequency:50Hz, Phase-3, Motor Coil: Copper, IP-65, IE3, Motor Body MOC : Iron Alloy /CI, Ambient temp: 50 Deg cel Design, Supply Installation and Commissioning of Priming Pot Specification :FRP To be fix with Centrifugal Pump Suction Line Pump Capacity-200m3/hr, H-25M, Suction/Discharge: Suction Lift 4.5 Meter Priming Pot Connection Flanges Should be FRP/PVC which flange with size suitable size for the Pump Suction Working Fluid Sea Water and Supply and Installation of PVC Foot Valve in PVC suction Pipe and suitable PVC NRV in Pump Discharge , Pump Casing MOC: Duplex Steel, Casing Cover: Duplex Steel Pump Impeller MOC: Duplex Steel, Impeller Type : Closed Impeller Shaft MOC: SS329L, Sleeve MOC: SS329L, Mechanical seal fluid contact Parts MOC: SS329L, Standard: EN 22858, ISO 2858, DIN 24256, Oil Lubrication, Breather, Filling Plug on Top, Oil Sight Glass, Constant Oil Leveler, Accessories comprising with MS with Hot Dip Galvanizing,</p>	1.00	Each	840000.00	840000.00	840000.00
210	<p>Market Rate Supply, Installation and Commissioning of Vaccum Pump Pump Specification: Pump Type: Vacuum Pump, Power 3.7 KW(5 HP), Vacuum Maximum :635 mm</p>	1.00	NOS	190000.00	190000.00	190000.00

	Hg,Air Flow maximum:73.8 m3/hr,Suction Size :40 mm,Delivery Size:40 mm,Rated Voltage :415 V,Speed: 1450 RPM,Phase : 3 Phase,Frequency:50 Hz,No of stage :1,Impeller:Stainless Steel,Delivery Casing: Cast Iron,Motor Body: Cast Iron,Pump Shaft: Carbon Steel,Seal Gland Packing,Dimension:1080X625X610 MM,260 Kg					
211	Air Blowers (Twin lobe positive displacement air blower)					
211.01	Market Rate Twin lobe positive displacement air blower of capacity 450 M3/ hr@ 3 meter water depth complete set with Air blower, Electric motor 3 phase 440V AC 50 Hz, filtration module, V belt with tightening arrangement, NRV, pressure gauge, safety valve, suction discharge full pipe companion assembly with coupling of size minimum 75 to 90 mm, blower and motor pulley, suction silencer, base frame, foundation bolt with base frame, at least 3 meter additional pipe for heat loss.	2.00	Each	180000.00	360000.00	360000.00
212	Ozone Generator with Oxygen Concentrator					
212.01	Market Rate Supply, Installation and Commissioning of Ozone Generator with Oxygen Concentrator with suitable capacity Circulation pump and Venturi Injectors, Flow Meter and Accessories with Air Cooling System Capacity:60 GPH,Oxygen Flow:10LPM,Oxygen Pressure:7PSI,Ozone Generation Principle: On corona discharge principle,Power consuption:600 Watt,O/P frequency:5-10 KHz,High Voltage O/P:36000V PP Volt,MOC: Wetted parts in Ozone compatible material and Outer Panel in Mild steel with Powder coated,O2 Inlet /O3 Out let :SS316,6mm Nozzle,Ozone O/P Control:20-100%,HT Transformer : Air Cooled,Way of Cooling: Air Cooling for internal and External Electrode,Dew Point:-45 degree C,Ambient Temp : Not Exceeding 32 deg,Ozone Concentration:80-90 mg/L,Indication: Mains on LED/Ozone ON/Ozone current,Size: LXWXH:604X405X962 mm Weight:45 Kg ,Volt:230+/- 10%,Ac,50Hz,1 Phase,+5% supply with Earthing Oxygen Concentrator Specification:Electrical: 230V-50 Hz,Flow Delivery Rate:0 to 10LPM,Oxygen Concentration:93%+/- 3%,Power consuption 650 Watts,Operating Pressure(Mpa): 0.04-0.07,Filters:Cabinet,Compressor Intake & Bacteria,Battery:9Volt,Weight<28 Kg,Size: LXWXH:365X375X600 mm,Operating Environment: Ambient Temperature:(10Deg C to 40Deg C),Humidity: 15% to 95% Non-Condensing,Storage Range Temperature:(20Deg C to 6 Deg C),Humidity:15% to 95%,Non Condensing	1.00	SET	450000.00	450000.00	450000.00
213	Ozone Mixing Cone					
213.01	Market Rate Supply, Installation and Commissioning of Ozone Mixing Cone Diameter: 0.9 Meter Height: 2.38 Meter Inlet/Outlet Size:150mm Liquid Flow:80 M3/hr Gas Port : Ozone Inlet Bush 3/4"X1/2" MOC:SS316 Pressure gauge Mounting Bush 3/4"X1/2" MOC:SS316	1.00	NOS	100000.00	100000.00	100000.00
214	UV Sterilizer					
214.01	Market Rate Supply, Installation and Commissioning of UV Sterilizer Pipe Size line Inlet and Outlet Water : 110mmWater Flow : 100m3/hr,Operting pressure(1-4 Kg/cm2),Operating Temperature:2-42 Deg C,Recommende ON/OFF cycle: <4/24 hrs,UV Dose:30MJ/cm2,Electrical:220V ,50Hz,Application: Sea Water Disinfection Purpose,UV system with suitable Control Panel,With Digital Hour Meter With Safety devices Included	1.00	NOS	200000.00	200000.00	200000.00

215	Rapid Sand Filter					
215. 01	Market Rate Supply and Installation of Rapid Sand Filter Long Lasting non Corrosive UV resistance composites allow to resist extreme weather conditions for long life without corrosion top mount Rapid sand filter of diametr of 40" inlet/Outlet 2 inch of of flow 39000 Litre/hr Spherical tank with uniform wall thickness (V 1000 dia -40" Top mount Filter 2" Valve 39000 Litres Features: Fibre glass reinforced tank with UV resistant surface finish,2.Internal surface of the tank is finished with water resistant resin,3.Spherical tank with uniform wall thickness or similar , Sand filter with Glass media for Rapid sand filters of Size 6 to 8 mm ,Sand Filter with Multiport valve also in scope of supply	1.00	NOS	100000.00	100000.00	100000.00
216	Solar Power Plant Capacity :30 KWp Expected Annual Production: 48,000 units					
216. 01	Market Rate Design, Supply, Installation and Commissioning of Grid Tied Solar Power System of 30 Kw in Ground Mounted GI Structure,Supply,Installation, Testing and commissioning of Solar Bidirectional Meter (Including Liasoning with EB Department for obtaining proper approvals (CEIG)), Power Plant Capacity: 30 KWp, Expected Annual Production: 48,000 units, Proposed PV (Photovoltaic) Module: MONOPERC HalfCut, Module rating: 550Wp, Number of modules: 54 No's, Maximum PV array voltage: 1000 V, INVERTER Rating: 30 KW 3 Phase, No. Of Inverter: 1 No, Solar Panels MONOPERC Halfcut (Qty-54 Nos) Capacity: 550 Wp, Warranty: 12 Years product warranty,25 Years Performance,Solar On Grid Inverter, Capacity: 30 kW 3 Phase, (Qty-1 Nos)Solar Mounting Structure, Capacity: 30 KW,(Qty-1 Set)DCDB , with SPD & Fuse, supply Installation and comissioning of Lightning Arrestor &Accessories Supply Installation comissioning of AC Earth Pit-Double Earth - 1meter Depth-17 mm dia chemical earth(Qty-2 Nos),Dc Earth Pit-Double Earth - 1meter Depth-17 mm dia ,chemical earth(Qty-2 Nos),chemical earth,Earth strip as required etc. Free Periodical maintenance visit will be done once in a month for 10 Years, Net metering application submission & getting Meter from EB will be done by contractor scope, Elctical DC Ac Connection In Power plant and Power plant to EB Main Panel Electrical cable,Glands,Lugs,etc as required	1.00	NOS	1593200.00	1593200.00	1593200.00
216. 02	Including liasoning with EB department for obtaining proper approvals(CEIG) Net metering application, submission and getting meter from EB will be contractor scope					
217	SERVO Control Voltage Stablizer 150 KVA					
217. 01	Market Rate Supply, Installation and Commissioning of SERVO Control Voltage Stablizer Capacity 150 KVA Oil Cooled Industrial Model Input Voltage:295-465 V,Output:400V +/- 1% with Surge Protector,Bypass Switch,I/P MCB,O/P Contactor,Fiber Cable Wiring and End termination ,Over load protection,Short Circuit Trip,Time Delay controls,Phase reversal Protection,High Voltage Cut off,Low Voltage cut OFF,Torridly Wound Variable Auto Transformer,Drive: Direct AC Drive,Staandard: IS 9815,IS 5142,IS 302-1,Duty Cycle: Continous:24 Hrs,Class of insulation: E,Alarm: Low and high voltage,Single phase alarm,Phase reversal Alarm,LCD monitor to using to view Input/Out put Voltage and Current, Micro Controller base	1.00	NOS	457280.00	457280.00	457280.00

	Programable Control circuit with all accessories etc. as required (Warranty:2 Years)					
218	Supply,Installation Commissioning of DG with AMF Panel and Power Cables and Accsories Power Rating KVA:125					
218. 01	Market Rate Supply,Installation Commissioning of DG with Power Rating KVA:125 , No.of Phase and wire: 3 phase , 4 wire, Power Factor: 0.8 (lagging), Current: 174 A, RPM: 1500,MOEF Certified Power(HP):159,Required Power for Rated KVA (HP):158, Cooling: Liquid Cooled (EG Complete 50:50), No of Cylinder: 6-In line, Bore (mm) X Stork (mm): 102X120 , Compression Ratio:16.5:1, Displacement (Litre): 5.9, Fuel: Diesel, Fuel Consumption @75% Load with radiator and fan (Litre/hr):22.5, Fuel Consumption @100 % Load with radiator and fan (Litre/hr):30.25, Performance Class of Genset: ISO 8528-5 G2, Starting System: 24 V DC Electrical, Lube Oil Specification: CI4+ 15W40, Lube oil Sump Capacity high- Low level (litre):19.9-14.9, Total Lubrication system capacity (Litres):21.4, Total coolant Capacity (litres):26, Exhaust Pipe size(inch):4, Length X Width X Height (Engine) (mm):1066X725X1033, Mean piston Speed(m/s):6, Combustion Air Intake @100% Load (±5%) (cfm):311, Alternator Make: STAMFORD (CGT), Brushless Type, Screen Protected, Revolving Field, Self-Excited Alternator Confirming IS/IEC 60034-1, 3 Phase Reconnectable winding with 12 Terminals brought out for connectionSealed Bearings for longer life and lesser Maintenance, Enclosure: IP23, Voltage Regulation (Max): ±1%, Class of Insulation: H Class, Winding Pitch: 2/3, Stator Winding: Double Layer Lap, Rotor: Dynamically Balanced, Waveform distortion/ Total Harmonic Distortion: No Load <1.5% , Non distorting balanced Linier Load <5%, Maximum Unbalanced Load across Phases: Less than or Equal to 25 %,Inline Fuel pump with Mechanical governing, Battery: 1x12V DC Battery, Battery Charging Alternator, Standard integral set mounted radiator system, designed and tested for 50 Deg Celsius ambient temperature, Mounted on a Common MS Base Frame with AVM pads Base frame with Integral fuel Tank is provided with Drain Plug, Air vent and Outlet Connection, Level Indicator and Provision for cleaning, Control Panel: Control Panel is manufactured with 14/16 gauge CRCA sheet and is powder coated for weather proof, Aluminium bus bars with suitable capacity with incoming and outgoing terminals,	1.00	NOS	1650000.00	1650000.00	1650000.00
218. 02	Indicating Lamps for Load ON, And Set Running, Instrument Fuses duly wired and ferruled, MCCB of suitable rating with overload and short circuit protection, Engine Metering, Oil Pressure, Coolant Temperature, Battery Voltage, Engine Speed, AC Alternator Metering: L-L Voltage and L-N voltage Current (Phase and Total) Amperes (Phase and Total) and Frequency, Engine protection: Low lube oil pressure, High/Low Coolant Temperature,Over Speed,Battery Over/Under /Weak Volts,Fail to Crank/Start,Sensor Failure,Low Coolant Level sensor, Temperature, Battery Over/Under /weak Volts, Fail to crank /Start, Sensor Failure, Cranking Lockout, Low fuel Level, AC Alternator Protection: Over/Under Voltage, Over/Under Frequency,Over Current,Short Circuit and Loss of AC Sensing, Data Logging: Engine Hours, Control Hours,Engine Starts and Up to 10 recent Fault codes, Configurable glow plug control ,12V DC					

	Operation, Sleep Mode Modbus Interface, In power Compatible(PC based service tool), Acoustic Enclosure: Specially designed to meet Stringent MoEF /CPCB norms of 75 dBA @ 1 mtr at 75 % load and free field conditions, The acoustic Enclosure is made of CRCA sheets in Munsel green Shade and a Structural/Sheet Metal Base Frame, High Quality Noise absorbent and fire retardant grade acoustic insulation material (Rockwool)Complying to IS 8183, Base lifting for Easy Handling at Customer Site, Fluid drains for lube oil and Fuel, Fuel filling arrangement inside the				
218. 03	Enclosure, Conformance Standards: IS/IEC 60034-1, IS 1460, ISO 8528, ISO 3046, ISO 9001, IS 13018, Silencer: Hospital Grade Silencer Suitably Optimised to meet Stringent noise emission standards laid down by MoEF/CPCB Supply Installation Comissioning all End Termination of AMF Control Panel with Auto Change Over Mechanism with suitable Breaker: The control panel shall be fabricated out of 1.5 mm Thick sheet steel ,Totally enclosed dust, damp and vermin proof free standing floor mounted type & front operated. It shall be made into section such that as far as feasible, there is no mixing of control power, DC & AC functions in the same section and they are sufficiently segregated except where their bunching is necessary. Hinged doors shall be provided preferably double leaf for access for routine inspection from the rear. The degree of protection required will be IP-42 confirming IS2147, Labeling: all internal components shall be given suitable identification labels shall be fixed on buttons, indication lamps etc, Painting : The entire panel shall be given primer coat after proper treatment and powder coating with 7 tank process before assembly of various items, Control system equipments and components such as relays, contactors, timers, etc. Both for automatic operation on main failure and as well as normal operation, Equipments and components necessary for testing generating set's healthiness with test mode and with load on mains, Necessary instruments and Accessories such as voltmeter, power factor meter, KW meter, KWH meter, Ammeter, Frequency meter etc. in one energy analyzer unit with selector switch to obtain the reading of desired parameters, Necessary indication lamps, fuses, terminal box, Push buttons, control Switches etc as required, Necessary Engine/ Generating set shut down devices due to faults/abnormalities, Necessary visual audio				
218. 04	Alarm indication and annunciation facility as specified, Necessary Battery Charger Necessary excitation control and voltage regulation equipment.(Alternatively provide on the Alternator itself) Necessary overhead bus trunking terminations all internal wiring. Connections etc. As required Mode Auto Mode, Manual Mode, DG Erection and Machinery For Erection: All tools and Tackels, Crane required for Unloading /Handling of Equipments and Materials at site, their assembly, Erection, Testing, Commissioning Shall be the responsibility of the Contractor Statutory Clearance (S): Approval /Clearance of the Complete installation shall be obtained by the contractor from CPCB/State Pollution Control Boards /Local Bodies/ Central Electricity Authority (CEA) other Licensing authorities whenever required. However, Application shall be made by Departmental and any Statutory				

	fee,as Applicable, Shall be paid by Department directly to the Govt. authorities concerned. Supply and Installation ,End Termination of PVC Sheathed ,XLPE Insulated 4 core 120 sqmm Armoured Alumnum cable PVC Sheathed ,XLPE Insulated (Cable length-50 meter approx) Cable laying and End termination from DG to AMF Panel and AMF Panel to 200A Change Over Switch supply Installation of On Load Changeover Switch Disconnectors (Manual) With SS Enclosure,415V,50Hz,4 Pole,Rated Operational Current-200A,Rated Insulation voltage 1000V and connection to be given as per the site requirements etc as required and also all cable with gland and Lugs ,Clamps ,clamping ,laying Excavation work and refilling with proper Conduit with safety measures					
219	Market Rate supply Installation of On Load Changeover Switch Disconnectors (Manual) With SS Enclosure,415V,50Hz,4 Pole,Rated Operational Current-200A,Rated Insulation voltage 1000V	1.00	NOS	20000.00	20000.00	20000.00
220	Cartrige Filter					
220.01	Market Rate Supply of Cartrige Filter Filter Area Sq ft:200 Verical Clearance :76",Filter Diameter:15.5 ",Flow Rate:34 m3/hr with Air relief valve, Lock ring,Esy to remove and Rinse,2" Plumbing with Pressure Gauge and Filter Housing Fibre glass reinforced tank	4.00	NOS	30000.00	120000.00	120000.00
221	Market Rate Supply of Deep freezer 500Litre Horizontal Double Door 230V 50Hz	1.00	NOS	50000.00	50000.00	50000.00
Total Estimated Cost					49200258.17	49200258.17

(to be signed on a stamp paper with minimum value of Rs.100)

Annexure - 4

INTEGRITY AGREEMENT

This Integrity Agreement is made at..... on this.....day of.....20.....

BETWEEN

Rajiv Gandhi Centre for Aquaculture,

RGCA,....., (Hereinafter referred as the
(Address of Division)

'Director RGCA, which expression shall unless repugnant to the meaning or context
hereof include his successors and permitted assigns)

AND

(Name and Address of the Individual/firm/Company)

Through.....(Hereinafter
referred to as the (Details of duly authorized signatory) "Bidder/Contractor "and which
expression shall unless repugnant to the meaning or context hereof include its
successors and permitted assigns) Preamble WHEREAS the Director RGCA has floated
the Tender (NIT No) (hereinafter referred to as "Tender/Bid") and intends to
award, under laid down organizational procedure, contract for (Name of work)
hereinafter referred to as the "Contract". AND WHEREAS the Director RGCA values full
compliance with all relevant laws of the land, rules, regulations, economic use of
resources and of fairness/transparency in its relation with its Bidder(s) and
Contractor(s).AND WHEREAS to meet the purpose aforesaid both the parties have
agreed to enter into this Integrity Agreement (hereinafter referred to as "Integrity Pact"
or "Pact"), the terms and conditions of which shall also be read as integral part and parcel
of the Tender/Bid documents and Contract between the parties. NOW, THEREFORE, in
consideration of mutual covenants contained in this Pact, the parties hereby agree as
follows and this Pact witnesses as under:

Article 1: Commitment of the Director RGCA

(1) The Director RGCA commits itself to take all measures necessary to prevent
corruption and to observe the following principles:

a) No employee of the RGCA, personally or through any of his/her family
members, will in connection with the Tender, or the execution of the Contract,
demand, take a promise for or accept, for self or third person, any material or
immaterial benefit which the person is not legally entitled to.

b) The Director RGCA will, during the Tender process, treat all Bidder(s) with
equity and reason. The Director RGCA will, in particular, before and during the
Tender process, provide to all Bidder(s) the same information and will not provide

to any Bidder(s) confidential / additional information through which the Bidder(s) could obtain an advantage in relation to the Tender process or the Contract execution.

c) The Director RGCA shall endeavor to exclude from the Tender process any person, whose conduct in the past has been of biased nature.

2) If the Director RGCA obtains information on the conduct of any of its employees which is a criminal offence under the Indian Penal code (IPC)/Prevention of Corruption Act, 1988 (PC Act) or is in violation of the principles herein mentioned or if there be a substantive suspicion in this regard, the Director RGCA will inform the Chief Vigilance Officer and in addition can also initiate disciplinary actions as per its internal laid down policies and procedures

Article 2: Commitment of the Bidder(s)/Contractor(s)

1. It is required that each Bidder/Contractor (including their respective officers, employees and agents) adhere to the highest ethical standards, and report to the Director RGCA all suspected acts of fraud or corruption or Coercion or Collusion of which it has knowledge or becomes aware, during the tendering process and throughout the negotiation or award of a contract.

2. The Bidder(s)/Contractor(s) commits himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the Tender process and during the Contract execution:

a) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of RGCA's employees involved in the Tender process or execution of the Contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the Tender process or during the execution of the Contract.

b) The Bidder(s)/Contractor(s) will not enter with other Bidder(s) into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to cartelize in the bidding process

c) The Bidder(s)/Contractor(s) will not commit any offence under the relevant IPC/PC Act. Further the Bidder(s)/Contractor(s) will not use improperly, (for the purpose of competition or personal gain), or pass on to others, any information or documents provided by the Director RGCA as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.

d) The Bidder(s)/Contractor(s) of foreign origin shall disclose the names and addresses of agents/representatives in India, if any. Similarly Bidder(s)/Contractor(s) of Indian Nationality shall disclose names and addresses of foreign agents/representatives, if any. Either the Indian agent on behalf of the foreign principal or the foreign principal directly could bid in a tender but not both. Further, in cases where an agent participate in a tender on behalf of one manufacturer, he shall not be allowed to quote on behalf of another manufacturer along with the first manufacturer in a subsequent/parallel tender for the same item.

e) The Bidder(s)/Contractor(s) will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the Contract.

3. The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

4. The Bidder(s)/Contractor(s) will not, directly or through any other person or firm indulge in fraudulent practice means a willful misrepresentation or omission of facts or submission of fake/forged documents in order to induce public official to act in reliance thereof, with the purpose of obtaining unjust advantage by or causing damage to justified interest of others and/or to influence the procurement process to the detriment of the Director RGCA interests.

5. The Bidder(s)/Contractor(s) will not, directly or through any other person or firm use Coercive Practices (means the act of obtaining something, compelling an action or influencing a decision through intimidation, threat or the use of force directly or indirectly, where potential or actual injury may befall upon a person, his/ her reputation or property to influence their participation in the tendering process).

Article 3: Consequences of Breach

Without prejudice to any rights that may be available to the Director RGCA under law or the Contract or its established policies and laid down procedures,

the Director RGCA shall have the following rights in case of breach of this Integrity Pact by the Bidder(s)/Contractor(s) and the Bidder/ Contractor accepts and undertakes to respect and uphold the Director RGCA absolute right:

1. If the Bidder(s)/Contractor(s), either before award or during execution of Contract has committed a transgression through a violation of Article 2 above or in any other form, such as to put his reliability or credibility in question, the Director RGCA after giving 14 days' notice to the contractor shall have powers to disqualify the Bidder(s)/Contractor(s) from the Tender process or terminate/determine the Contract, if already executed or exclude the Bidder/Contractor from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of transgression and determined by the Director RGCA. Such exclusion may be forever or for a limited period as decided by the Director RGCA.

2. Forfeiture of EMD/Performance Guarantee/Security Deposit: If the Director RGCA has disqualified the Bidder(s) from the Tender process prior to the award of the Contract or terminated/determined the Contract or has accrued the right to terminate/determine the Contract according to Article 3(1), the Director RGCA apart from exercising any legal rights that may have accrued to the Director RGCA, may in its considered opinion forfeit the entire amount of Earnest Money Deposit, Performance Guarantee and Security Deposit of the Bidder/Contractor.

3. Criminal Liability: If the Director RGCA obtains knowledge of conduct of a Bidder or Contractor, or of an employee or a representative or an associate of a Bidder or Contractor which constitutes corruption within the meaning of IPC Act, or if the Director RGCA has substantive suspicion in this regard, the Principal/Owner will inform the same to law enforcing agencies for further investigation.

Article 4: Previous Transgression

1. The Bidder declares that no previous transgressions occurred in the last 5 years with any other Company in any country confirming to the anti-corruption approach or with Central Government or State Government or any other Central/State Public Sector Enterprises in India that could justify his exclusion from the Tender process.

2. If the Bidder makes incorrect statement on this subject, he can be disqualified from the Tender process or action can be taken for banning of business dealings/ holiday listing of the Bidder/Contractor as deemed fit by the Director RGCA.

3. If the Bidder/Contractor can prove that he has resorted / recouped the damage caused by him and has installed a suitable corruption prevention system

Article 5: Equal Treatment of all Bidders/Contractors/Subcontractors

1. The Bidder(s)/Contractor(s) undertake(s) to demand from all subcontractors a commitment in conformity with this Integrity Pact. The Bidder/Contractor shall be responsible for any violation(s) of the principles laid down in this agreement/Pact by any of its Subcontractors/sub-vendors.

2. The Director RGCA will enter into Pacts on identical terms as this one with all Bidders and Contractors.

3. The Director RGCA will disqualify Bidders, who do not submit, the duly signed Pact between the Principal/ Owner and the bidder, along with the Tender or violate its provisions at any stage of the Tender process, from the Tender process.

Article 6- Duration of the Pact

This Pact begins when both the parties have legally signed it. It expires for the Contractor/ Bidder 12 months after the completion of defect liability period and for all other bidders, till the Contract has been awarded.

If any claim is made/lodged during the time, the same shall be binding and continue to be valid despite the lapse of this Pact as specified above, unless it is discharged/determined by the Competent Authority, RGCA.

Article 7- Other Provisions

1. This Pact is subject to Indian Law, place of performance and jurisdiction is the Headquarters of the Division of the Director RGCA, who has floated the Tender.

2. Changes and supplements need to be made in writing. Side agreements have not been made.

3. If the Contractor is a partnership or a consortium, this Pact must be signed by all the partners or by one or more partner holding power of attorney signed by all partners and consortium members. In case of a Company, the Pact must be signed by a representative duly authorized by board resolution.

4. Should one or several provisions of this Pact turn out to be invalid; the remainder of this Pact remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

5. It is agreed term and condition that any dispute or difference arising between

the parties with regard to the terms of this Integrity Agreement / Pact, any action taken by the Director RGCA in accordance with this Integrity Agreement/ Pact or interpretation thereof shall not be subject to arbitration.

Article 8- LEGAL AND PRIOR RIGHTS.

All rights and remedies of the parties hereto shall be in addition to all the other legal rights and remedies belonging to such parties under the Contract and/or law and the same shall be deemed to be cumulative and not alternative to such legal rights and remedies aforesaid. For the sake of brevity, both the Parties agree that this Integrity Pact will have precedence over the Tender/Contact documents with regard any of the provisions covered under this Integrity Pact.

IN WITNESS WHEREOF the parties have signed and executed this Integrity Pact at the place and date first above mentioned in the place and date first above mentioned in the presence of following witnesses:

(For and on behalf of Director RGCA)

(For and on behalf of Bidder/Contractor)

WITNESSES:

1.....

(Signature, name and address)

2.....

(Signature, name and address)

Place:

Dated:

(to be submitted in the letter head of the bank)

Performance Security (Guarantee)

Bank Guarantee Bond

In consideration of the Director, RGCA (hereinafter called "The Director") having offered to accept the terms and conditions of the proposed agreement between.....and(Hereinafter called "the said Contractor(s)") for the work.....(Hereinafter called "the said agreement") having agreed to production of an irrevocable Bank Guarantee for Rs. (Rupees only) as a security/guarantee from the contractor(s) for compliance of his obligations in accordance with the terms and conditions in the said agreement.

1. We, (Hereinafter referred to as "the Bank") hereby undertake to pay to the Director RGCA an amount not exceeding Rs. (Rupees..... Only) on Demand by the Director.
2. We,(indicate the name of the Bank) do hereby undertake to pay the amounts due and payable under this guarantee without any demur, merely on a demand from the Director stating that the amount claimed as required to meet the recoveries due or likely to be due from the said contractor(s). Any such demand made on the bank shall be conclusive as regards the amount due and payable by the bank under this Guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs.....(Rupees only).
3. We, the said bank further undertake to pay the Director any money so demanded notwithstanding any dispute or disputes raised by the contractor(s) in any suit or proceeding pending before any court or Tribunal relating thereto, our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment thereunder and the Contractor(s) shall have no claim against us for making such payment.
4. We, (indicate the name of the Bank) further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said agreement and that it shall continue to be enforceable till all the dues of the Director under or by virtue of the said agreement have been fully paid and its claims satisfied or discharged or till

Engineer-in- Charge on behalf of the Director certified that the terms and conditions of the said agreement have been fully and properly carried out by the said Contractor(s) and accordingly discharges this guarantee.

5. We, (Indicate the name of the Bank) further agree with the Director that the Director shall have the fullest liberty without our consent and without affecting in any manner our obligation hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said Contractor(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the Director against the said contractor(s) and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said Contractor(s) or for any forbearance, act of omission on the part of the Director or any indulgence by the Director to the said Contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

6. This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor(s).

7. We, (Indicate the name of the Bank) lastly undertake not to revoke this guarantee except with the previous consent of the Director in writing.

8. This guarantee shall be valid up tounless extended on demand by the Director. Notwithstanding anything mentioned above, our liability against this guarantee is restricted to Rs..... (Rupees.....) and unless a claim in writing is lodged with us within six months of the date of expiry or the extended date of expiry of this guarantee all our liabilities under this guarantee shall stand discharged.

Dated theday offor(indicate the name of the Bank)

(To be submitted in the letter head of the company/firm)

Form-1

FORM OF PRE-QUALIFICATION

NAME OF THE WORK	ESTABLISHMENT OF BROODSTOCK MULTIPLICATION CENTRE FOR TIGER SHRIMP AT THEKKURICHI VILLAGE, RAJAKKAMANGALAM, KANNYKUMARI DISTRICT, TAMIL NADU.
-------------------------	--

1	Name of the Organization/Firm/Tenderer	
2	Postal Address & Contact No.	
3	Address of Registered / Main Office	
4	Date of establishment	
5	Status of the Company/ Firm/Entity (enclose proof) - (Whether Public Ltd./ Private Ltd./ LLP / Partnership Proprietorship)	
6	Name of Director/Partners/Proprietor i) ii) iii)	
7	GST Registration Number (Enclose copy)	
8	Permanent Account Number (Enclose copy)	
9	Details of Contractor License from PWD/ CPWD/ MES/ ISRO a. License No b. Valid up to c. Issuing Authority :	
10	Financial resource of the Firm a. Paid up capital b. Working capital c. Average annual financial turn over for the last three years	

11	Whether any bank guarantee/security was invoked as a penalty measure in non-compliance of any assumed work in the last 5 years. If yes, furnish details.	
12	If you are registered in the panel of other Organizations, Statutory bodies, Banks etc., furnish their names, category and date of registration. (Copy to be enclosed)	i) ii)
13	What are your fields of activities? Mention the fields on preference basis.	i) ii)
14	Furnish the names of three client reference as well as past performance of your Organization.	i) ii) iii)
15	Have you had any Legal / Arbitration / proceedings instituted in connection with works carried out by you? If so furnished details.	
16	Furnish photographs of important Projects carried out, if available	
17	EPF establishment code	
18	ESI establishment number	
19	UTR Number and date towards proof for remittance of tender fee (if not applicable, specify as "Exempted" and submit supporting documents)	
20	UTR Number and date towards proof for remittance of EMD (if not applicable, specify as "Exempted" and submit supporting documents)	
21	Others (If any)	

Sl. No.	Name	Designation	Contact Number & Email Id
1.			
2.			
3.			

Encl.

1. Contract License from PWD/CPWD/MES/ISRO
2. Status of Company/Firm/Entity
3. GST Registration Certificate
4. Permanent Account Number
5. Audited financial statements (Last 3 years)
6. Income Tax Returns & Form 16 A/Form 26 AS (Last 3 years)
7. Proof of documents like Work Order, Completion Certificate etc.
8. Integrity Pact duly signed
9. Declaration about Site Inspection
10. Solvency or Liquidity Certificate
11. Net worth & turn over certificate

Acceptance Certificate

i) I / We certify that the information given above is true to the best of knowledge. I / We also understand that if any of the information is found wrong, I / We am/are liable to be debarred.

Signature of applicant

Date:

(To be signed on a stamp paper with minimum value of Rs. 20)

FORM – 2

INTEGRITY PACT

To
The Director

Rajiv Gandhi Centre for Aquaculture (RGCA)
3/197, Poompuhar Road, Karaimedu Village
Sattanathapuram Post, SirkaliTaluk
Mayiladuthurai District, Tamil Nadu
Pincode: 609109

Sub: Submission of Tender for the work of _____.

Dear Sir,

I/We acknowledge that Rajiv Gandhi Centre for Aquaculture (RGCA) is committed to follow the principles thereof as enumerated in the Integrity Agreement enclosed with the tender/bid document. I/We agree that the Notice Inviting Tender (NIT) is an invitation to offer made on the condition that I/We will sign the enclosed integrity Agreement, which is an integral part of tender documents, failing which I/We will stand disqualified from the tendering process. I/We acknowledge that THE MAKING OF THE BID SHALL BE REGARDED AS AN UNCONDITIONAL AND ABSOLUTE ACCEPTANCE of this condition of the NIT.

I/We confirm acceptance and compliance with the Integrity Agreement in letter and spirit and further agree that execution of the said Integrity Agreement shall be separate and distinct from the main contract, which will come into existence when tender/bid is finally accepted by RGCA. I/We acknowledge and accept the duration of the Integrity Agreement, which shall be in the line with Article 1 of the enclosed Integrity Agreement.

I/We acknowledge that in the event of my/our failure to sign and accept the Integrity Agreement, while submitting the tender/bid, RGCA shall have unqualified, absolute and unfettered right to disqualify the bidder/bidder and reject the tender/bid in accordance with terms and conditions of the tender/ bid.

Yours faithfully

(Duly authorized signatory of the Bidder)

Form - 3

DECLARATION ABOUT SITE INSPECTION

To

The Director,
Rajiv Gandhi Centre for Aquaculture,
(MPEDA, Ministry of Commerce & Industry, Govt. of India),
3/197, Poompuhar Road, Karaimedu Village,
Sattanathapuram Post, SirkaliTaluk,
Mayiladuthurai District, Tamil Nadu.
Pincode: 609109. Ph: 04364 265200

Sub: RGCA Tender No ----- for the work "ESTABLISHMENT OF BROODSTOCK MULTIPLICATION CENTRE FOR TIGER SHRIMP AT THEKKURICHI VILLAGE, RAJAKKAMANAGALAM, KANNYKUMARI DISTRICT, TAMIL NADU."

Dear Sir,

It is hereby declared that as per **1.4 Eligibility Criteria, Page 8**, I / We the bidder inspected and examined the subject site and its surrounding and satisfy myself / ourselves as to the nature of the ground and sub-soil (so far as is practicable), the forms and nature of the site, the means of access to the site, the accommodation which may require and all necessary information as to risks, contingencies and other circumstances which may influence or affect our bid have been obtained. I / We the bidder shall have full knowledge of the site and no extra charge consequent upon any misunderstanding or otherwise shall be claimed in later date.

I / We bidder shall be responsible for arranging and maintaining at own cost all materials, tools & plants, water, electricity access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a bid by me / us implies that I / We have read this notice and all other contract documents and has made myself /ourselves aware of the scope and specifications of the work to be done and local conditions and other factors having a bearing on the execution of the work.

Yours faithfully

(Duly authorized signatory of the bidder)

Name:

Designation:

Stamp:

(To be submitted in the letter head of the company/firm)

Form - 4

BID SECURITY DECLARATION
(RGCA Tender No -----)

I/we, _____, having office at _____ engage to supply the material(s) to RGCA project site and

- i) Accept that if I/we withdraw or modify my/our bids during the period of validity, or if I/we are awarded the contract and I/we fail to sign the contract, I/we will be suspended for a period of five years from being eligible to submit bids for any contracts with RGCA.
- ii) Comply with the tender schedule and technical specification indicated.
- iii) Comply with the item/tender specific conditions for this tender.
- iv) Accept the Terms and conditions including special conditions and general conditions printed in this tender.
- v) I/we understand that total quantity for the entire project is specified in the tender document, however multiple supply orders will be provided for the quantity to be delivered based on the progress of the work.
- vi) Confirm that set off for the ED, VAT, etc. Paid on the inputs have been taken into consideration in the above quoted price and further agree to pass on such additional duties as sets offs as may become available in future under VAT, etc.
- vii) Certify that I/we have not been debarred by any Government/Undertaking.
- viii) Certify that the rates quoted are not higher than the rates quoted for same item to any Government/ Undertaking.
- ix) Certify that the bid submitted by me/us is properly sealed and prepared so as to prevent any subsequent alteration and replacement.

Place:

Signature of Authorized Signatory

Date:

Name & Seal